***''Dwelling in the dissolve...''
Towards transdisciplinary posthuman pedagogies for complex times: Pedagogies/Posthumanities/Affect/Art***

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**Abstract**

The posthuman turn in education involves a shift from learning-as-cognition to a focus on connections between humans and non-human others; a move from the primacy of the written and spoken word to the re-emergence of the embodied self; and a recognition that other-than-human agents are always present in processes of learning. Posthuman pedagogies decentre humanistic values which privilege the individual, and Cartesian dualisms which separate body from mind, teacher from learner and human from non-human others. In this chapter we explore the role of posthuman pedagogy in creating, accelerating or supporting convergences across disciplines. Through two vignettes which move across the educational spectrum from formal/institutional to anarchist, we demonstrate how pedagogies such as psychogeography, material/somatic learning and Art Brut open up spaces beyond the classroom for ‘pedagogies of air’ (Barnett 2007, 2), facilitating learning across traditionally siloed domains of knowledge.  In these learning spaces, emotions and affect are not only noticed but instrumental in learning to care differently. Through pedagogies which re-establish processes of kinship, sympoiesis (Haraway 2016) and relationality, we facilitate transdisciplinary learning which allows us to ‘dwell in the dissolve...where fundamental boundaries have begun to come undone, unravelled by unknown futures’  (Alaimo 2016, 2).

Key words: Art; Pedagogy; Transdisciplinary; Education; Assemblage

**Introduction**

As educators face the ongoing and increasing challenges of widening inequalities, environmental degradation, technological innovation and zoonotic pandemics, it is timely to re-evaluate the role of pedagogy in accelerating or limiting our capacity to adapt. For a number of years, the pressures of increased managerialism, under-funding, and dependence on instrumental teaching methodologies and transactional pedagogical models (focused largely on tests) have combined to create a toxic school environment where staff morale is low and mental health issues (for both tutors and students) are on the rise (Ball and Collet-Sabé 2021). Within the depressed Further and Higher education sectors in England in which lecturers are time-poor, de-motivated and suffering the effects of academic capitalism (Husband and Mycroft 2019), opportunities to gather together are hard to come by; and attempts at change-making are thwarted by the individualistic and isolationary nature of our neo-liberal education systems. Increasingly, and even in universities, education is conflated with *schooling*; linear processes of development for technical or instrumental ends within systems which silo knowledge and limit new knowledge production. Curricula continue to be anthropocentric; yet as Snaza et al. (2014, 52) suggest ‘we are at the dead end of humanism, and now, together, we have to burrow in other directions’.

Within this challenging environment, posthuman thinking offers a new perspective. Taking a ‘posthuman turn’ in education shifts learning-as-cognition to focus on connections between humans and non-human others; moves us from the primacy of the written and spoken word to the re-emergence of the embodied self; and recognises that other-than-human agents are always present in processes of learning. Posthuman pedagogies decentre humanistic values which privilege the individual (and certain kinds of individual at that), and Cartesian dualisms which separate body from mind, teacher from learner and human from non-human others.

Braidotti (2013, 183-4) suggests that we need trans-disciplinary areas within our educational institutions; which ’explore the production of knowledge in a technologically mediated world; the new relationship between arts and sciences, and the poly-lingual realities engendered by globalization’. We suggest that posthuman pedagogical practice can help to enable transdisciplinary understandings of the world, through the use of art, embodied and affective knowledges, and a desire to avoid transmitting ‘fragments’ of knowledge (Dewey 1904) that separate the parts from the whole.  These diffractive methodologies do not ‘map where differences appear, but rather where the effects of difference appear’ (Haraway 1992, 300). Such pedagogies do not therefore set ideas or texts against another, but rather look to read these ideas through one another to produce patterns from which new ideas emerge (Bozalek and Zembylas 2017).

In this chapter we will explore two stories of posthuman pedagogy through vignettes which shift ideas from high theory to practical application. In the first, Kay relates the journey of undergraduate students on a Youth Studies module in an English Higher Education Institution. Initiating a diffractive curriculum which comprised human geography, English and world literatures, film, art and community philosophy, this pedagogical practice opened up spaces for thinking differently about the role of young people in the world today.  In the second, Peter tells the story of putting to work Art Brut in teacher education, exploring the role of creativity for its own sake in the transformation of hegemonic understandings of ‘teaching-as-normal’. By working transversally; that is, by cutting across disciplines and hierarchies, we think with Stacy Alaimo about how to facilitate transdisciplinary learning which allows us to ‘dwell in the dissolve...where fundamental boundaries have begun to come undone, unravelled by unknown futures’  (Alaimo 2016, 2). We therefore chart here a convergence of pedagogies, posthuman philosophies, art- and affect-based approaches to education that opens transdisciplinary pedagogical practices. We also show that convergence here operates not as something that is pre-established, but as an active method of converging these fields and offer some examples of this method from our own practices.

**Exploring Affective Pedagogies in Youth Studies**

Within current English education practice the heightened emphasis on cognition and memory reveals the Cartesian binary design of a system that obsesses over the management of the 'unruly' child body, while at the same time denying that body's agency in the learning process. In this vignette, I recount the development of a university Youth Studies module; a practice which aimed to bring the embodied responses of young students into conversation with a geographical and political mapping of their increasingly managed and surveilled learning environment.  Drawing on critical human and spatial geography (Lefebvre 1991; Soja 2009), and connecting with the natural sciences we took an approach which aimed to encourage transdisciplinary habits of mind, shifting space both metaphorically and physically as we moved outside the classroom.

Youth Studies modules, and associated degree programmes of Childhood Studies and Early Childhood are often portrayed as ‘low tariff’ degrees yet are rich in interdisciplinary pedagogical practice. Students often go on to careers which, whilst superficially valued as the ‘caring professions’ are in the most marginalised sectors marked by minimum wage and precarious employment and also marked along race, gender and class lines. Operating from a campus site which is a mix of open, grassed spaces, wooded areas and buildings dating from the 1700s to the present day, within a city with strong demarcations between working and middle classes, this particular module invited new pedagogic forms which did not operate in an abstract vacuum but situated students firmly in their locations.

Mid-way through the Youth Studies module the students were given the task of wandering the university campus as a form of ‘walking methodology’ (Springgay and Truman 2018) in which walking becomes a process of counter-mapping and counter-archiving. In this wandering, students were invited to pay attention, not only to the walk’s physical features, non-human aspects and layout, but also to their bodily and affective reactions to space and place as situated and located (young, female) subjects. Walking, particularly in notions of psychogeography, has often been positioned as a radical act (see Guy Debord and the Situationalists), with the inherent assumption that ‘bodies move through space equally’ (Springgay and Truman 2018, 6). This activity aimed to explore and rupture hegemonic beliefs around ready access to space and place, as we both situated ourselves and decentered the human via the promotion of other agents. Moving beyond closed (classrooms) to open systems and bringing back curiosity into everyday encounters allowed for affective responses and a shift from the emphasis on cognitive sense-making as usually experienced in university settings.

It should be noted here that affect is not about feelings or emotions (although they may well be present), but a social force or intensity that registers across different bodies (which may include the non-human or material). It ‘focuses on what a body can do and, through considerations of the intersubjective, transpersonal states of bodily being, opens an important way of thinking about institutional life’ (Taylor and Fairchild 2020, 14). The process of physically exploring the university campus thus brought into focus the affective responses of students in relation to human and non-human agents; which included not just visual inputs but a noticing of sound, smell and taste.  In this way we worked with Barnett’s (2007, 2) ideas of ‘pedagogies of air’; bringing in both the fresh and new air of the outdoors, and taking a long pause to breathe the air itself, thus disrupting the suffocating and accelerated dynamics of bureaucracy and academic business-as-usual.

During our walks, students used post-it notes to share their encounters with campus spaces such as lecture theatres, accommodation and libraries. Several remarked on a sense of feeling displaced, or out of place, particularly in relation to academic spaces. Others noted the bodily effects of walking on narrow paths between buildings in the presence of male-presenting Sports and Physical Education students who took up space, forcing them to stand back or move onto verges. Connecting to their religious or cultural identities, some noted physical discomfort in the presence of buildings primarily associated with the consumption of alcohol. Tensions between the natural environment and the proliferation of new building works were observed; not just cognitively but as a physical jarring. The very practice of walking and wandering also disrupted hegemonic linear university ‘clock-time’ temporalities, where walking to and fro is (usually) purposeful and productive, reflecting the standard nature of learning (a moving from ‘here’ to ‘there’). This practice of ‘slow ontology’ (Ulmer 2017) felt uncomfortable initially until we attended closely to these affects, gaining understandings of ourselves as embodied subjects and noticing manifestations of the neo-liberal academy both materially and spatially. Through defamiliarisation; ‘a pedagogical tool to encourage the knowing subjects to disengage themselves from the dominant normative vision of the self they had become accustomed to’ (Braidotti 2019, 139) new understandings of power and new modes of being were activated. Anger and frustration at the disabling use of university spaces, the pre-dominance of new building as neo-liberal posturing, or the excluding nature of dominant student culture were later transformed to *potentia* energy through the sharing of photographs and meaning-making on social media; a practice of affirmative ethics (Braidotti 2019).

Harney and Moten’s (2013) theories of ‘undercommons’ present a challenge to traditional modes of ‘study’ and where collaborative learning might take place. Expanding pedagogic practice into the outdoor environment allowed students to set their own direction, a process of nomadic detachment from the usual paths of learning. This is expressed by Moten (2018, para 6) as ‘fugitivity’: ‘a desire for and a spirit of escape and transgression of the proper and the proposed. It’s a desire for the outside, for a playing or being outside, an outlaw edge proper to the now always already improper voice or instrument’.

Thinking with the rhizome (Deleuze and Guattari 1987) further reveals the ways in which learning is not limited to the classroom, but stretches beyond its walls, as for many students, as learning is an emergent, non-linear process that may take place in spaces outside the remit of the organisation.  Our wanderings identified further spaces of ‘undercommons’ such as smoking areas, corridors, buses, kitchens, bedrooms and cafes, thus revealing that there are multiple sites of teaching and learning, as rhizomatic understandings of the ‘community as the curriculum’ (Cormier 2008) can show us where and when learning spills out into informal spaces. Taking a rhizomatic approach in this way suggests that separations, such as those between study/leisure, are artificial as the world does not exist of discrete, isolated objects; and realising that we are all part of multiplicities exposes complexity within our social systems, as in our ecological habitats.

The pedagogical and research methodologies put to work in the Youth Studies programme propose new modes of teaching and learning that not only recognise and ‘broaden the category of who gets to be admitted to the powerful category of human’ (Bayley 2018, 4) but allow students to recognise, acknowledge and critique the status quo in productive and affirmative ways. Moving away from linear pedagogy and curriculum is challenging within standardised and outcome-based education systems, but I have attempted to show here that it is possible to read education differently by paying attention to processes and phenomena usually overlooked in systems based around the idea of Cartesian dualism. As Barad (2007, 396) states:

Intra-acting responsibly as part of the world means taking account of the entangled phenomena that are intrinsic to the world’s vitality and being responsive to the possibilities that might help us and it flourish. Meeting each moment, being alive to the possibilities of becoming, is an ethical call, an invitation that is written into the very matter of all being and becoming.

**Coming to know through Art Brut**

*Raw art,* *outsider art*, *Art Brut* are contentious terms that suggest an insider status, a clearly defined interior to established art places and practices from which they differ. The terms are not interchangeable but are linked; outsider art (Cardinal 1972) evolved from DuBuffet’s 1940s promotion of Art Brut, and *Art Brut* itself directly translates to *raw art*. What any of the terms we apply, the focus is on artistic expression that is not readily placed within art schools, movements and established *places* of art. Outsider status is also a preferred or aspirational space for many artists, leading to complex concerns around the term’s use. Wilson (2014, 57) suggests we have reached a time in which, ‘*gone are the days of absolutes and manifestos’*  and that ‘*art brut*’ offers a period-specific response to a mid-twentieth century domination by modernism and modernist stranglehold on culture and representation.  Less contentious is that art, insider or outsider, has a place within education-as-system that allows it to be part of programmes defined as Art-Based, incorporated into art-based curricula, built into art-based processes and then having these processes challenged by art-based critical approaches.  All the while, these approaches to art as pedagogy remain in ‘art-based’ spaces, places, people, and ecologies, elements of a particular set of disciplines that define them and isolate them from broader appreciation, experience and application.

The contention in this part of our chapter is that art, and explicitly the use of art within education-as-system, offers a means of accessing ways of knowing that are denied us in established approaches to how we come to know. It is frustrating when we find ourselves bound by conformity when exploring alternative possibilities, and find our thinking, our teaching, our explorations straitjacketed by process, place and performative practice. We might find ourselves looking at Marxist interpretations of class, deliberating on Freirean approaches to dialogue and the significance of community, or Posthuman liberation of imaginative possibilities. Yet, most often, each takes place in the same, familiar places. The conventional (habitual - at least to the large portions of the Global North) constructs of strip-lit rooms, stacked lecture theatres, teacher-facing stages or whiteboards, roles and ways of thinking embedded in the walls and corridors we must walk to each opportunity. The skills we develop, the basic (as in fundamental) academic skills that form currencies of achievement are almost entirely grouped around our abilities to function in this environment. These become so entrenched as pathways to knowledge that they appear as irrefutable manifestations of what it means to learn.

How we can challenge this, disrupt these processes, shatter the illusion of how-we-come-to-know as accepted educational norms, has become the focus of much of my (Peter’s) work. This is not without an often-painful realisation of the inevitability of these conventions, the necessity of navigating things I cannot change. That societal existence insists on my ability to begin from within institutions and to find authenticity that at least begins there, even while seeking outside, roaming chaoid space for other, more-than-human awareness that is crucial to knowing beyond these conventions. In *Chaosmosis*, Guattari (1995, 133) says we can ask ‘How do you make a class operate like a work of art?’ and in so doing challenges what each of these elements does. Springgay and Rotas (2014, 2-3) argue that Guattari provokes approaches that are ‘ethical-political and engender a way of thinking about art, removed from form and function’ and that ‘Guattari is calling for a destruction of human-centered ideology’ . In transforming the class toward studio, we begin literal considerations of these terms while also recognising that when we begin thinking of what has changed, we start to question whether these actions are important, if this is valuable and if so in what ways are we altered? And what are we tapping into as part of our encounters with each other?

At the surface, the focus of this section of the chapter is on the use of art as a pedagogical approach. What I have attempted is the moving of lecture-based modules in degree level programmes in Education Studies, and postgraduate programmes in Initial Teacher Education programmes, towards creative studio-style spaces.  There is a contextual significance in these classes being within a Higher Education facility within a Further Education College (College Based Higher Education, CBHE). The Further Education sector in the United Kingdom is affected by an historic embedding within vocational, skill-based subjects and competence focussed assessment. The introduction of Higher Education elements was a response to political imperatives to raise the numbers of people with graduate qualifications to 50% of the population. The sectioning out of where those qualifications are achieved is interwoven with complex social, economic and cultural concerns. CBHE intakes tend to be older, with greater numbers of working-class students and largely from within 10 miles of the campus, with a large percentage of students who are parents. The facilities tend to be smaller, under-resourced and have a high percentage of previous graduates teaching on the programmes. Research is not part of the CBHE environment and when it does take place it tends to rely on the compulsion of the individual academic to self-fund, promote and publish.

The classroom as a work of art becomes more compelling in such contexts, of precarity and marginalisation, of low-resolution relevance to a HE national sector.  The opportunity for vibrancy, for articulating other forms of knowing - and expressing that knowing - requires alternate approaches to those established elsewhere. Chaoids (Deleuze and Guattari 1991) might provide space for the beginning of any reimagining of what has become too solid (Shukie 2019) but action must follow, to become articulated and visible if any resistance to moribund ways of education is to emerge. It is the challenge faced by educators in the margins, of creating a tangible and experiential route to thinking with newness, recognising diverse experiences and ways of knowing, moving beyond the purely human, especially the class-based, financially secure, culturally-relevant perfection of *human* that academia so often represents. ‘The class as work of art’ provides a symbol, a well shared mantra, that aligns our practice with wider deliberation.  Through this, our making real from the possible in how education works serves to move beyond transmission or merely knowledge trading. It is not the literal accomplishment of the classroom as art space we have achieved but the manifestation of early steps in dismantling the mental foundations and boundaries of what education should be. Rather than the insistence of vocational skills and trade-based futures, our purpose is to allow for other possibilities to emerge that challenge these restrictive impositions of who we are, what our collective becoming might be.

This was achieved first as an environmental shift. We moved furniture; losing the chairs and forming tables into a single flat workspace.  We introduced paints, glues, waxes and sculpture gels; brushes, spatulas, and palette knives were located in the centre of this newly assembled studio table, without order but with open access.  Environment as consideration is vital to the exercise, although the space itself is often the same room as that in which lectures take place. Institutional material restrictions of this as a Further Education College, of small buildings, high room usage, limited facilities and architectures of replication mean studio spaces do not exist. The architectonic modelling of education presents an insistence on how educational encounters are framed, shaping what we do by the design of the places in which we do it. The challenge is always in the definition of this as pedagogy. The terminology, the conceptual resonance of pedagogy immediately contradicts the purpose, that art as an approach to coming to know must at once be defined by established, moribund lenses of pedagogy-as-functional within education-as-system.

Within this space responses are diffuse, in some cases alarm, and in others audible excitement. There is a tendency for people to circle the table, as familiar territories are disrupted, disappeared. The patterns of education are only partially removed, this is the same building. People have made their way here through the usual entrance, taking coffee in the refectory, beginning routines that distinguish study from their employment, from home, from family roles.  The sessions have been discussed previously, they are not surprise interventions, but that seems to rarely alter the sense of astoundment, and the suddenness of this unfamiliarity is crucial. Whether destabilised through a newfound nescient state, or bewildered, made raw in the face of an unexpected space, these rattletrap feelings force open a threshold for newness.

This is not an artist’s studio any more than it is the conventional seminar or lecture space it has previously been.  The random collection of materials comes through accumulated years of finding and accruing, of gifts and purloining, funding requests and leftovers from other projects. This disorderly mishmash of colour and fluid and solid, of brush and palette and sponge, offers no clues to what might be accomplished - or whether anything is to be *accomplished* here at all. There are elements of Buchanan’s (2014, 4) ‘clutter assemblage’ in which clutter ‘is an end in its own right, not representing something else’. This responds to Deleuzo-Guattarrian critique of psychoanalysis and should be read in that context, but is not here. What is offered is the shaking of the walls of expected environmental presence to begin a wander through other ideas and ways of thinking. Buchanan’s identification echoes across my struggles as an educator, of finding way to realise or make tangible the unfamiliar, not as purely cognitive knowing.  To escape the freeway of thought already asphalted and signposted, routes so well defined that they are no longer travel to or from, but the journey itself that cannot be experienced anew but continually repeated travails of the same road, over and over again.  Lectures, lecture halls, seminar rooms (even with moveable seating and a choice of appropriate configurations) become hard surfaced blacktop that force any possible adventure into nothing more than excursions into the familiar.  Wild wandering and scrambles in the scree of the unfamiliar are doomed here, replaced by faux experiences emptied of their meaning and offered as shells of thinking detached from their signifier.

Within this new space the people gathered have different experiences and their evocations often throttle my own professional standing, that signifier of ‘Educator/ Lecturer’ that defines my ability to book this room, take this class, make these choices, change their direction. The choice of Art Brut as a method is a chance to break as much as possible from the expected, but recognises too the binding of practice with aching patterns of familiarity.  A tension between a *potentia* and *potestas*, generating a studio space of paint, canvas, paper, sponge and dialogue formed in the moment still forms in the walls of institution, fee-based courses, classroom and conformity.  Acts of resistance and wild thought are still visible and possible and perhaps more acutely experienced as they find newness in the very air of the old and expected.

What occurs is not therapy but can feel like it; the remembrance of childhood experiences in school, of the invitation to paint without purpose, or sculpt, or draw, use fingers, write, sit, talk, make mess, find detail, represent or destroy. We regularly lose a few canvases as people smash them up through frustration or in playful ‘what if’ moments. It can seem if these destructive moments are meant to remind me of my role as imagined by previous experiences (Do something! Respond! Tell me off!). Equally, carefully produced designs sometimes appear to be aiming toward recognition against static quality metrics that do not exist here and will never be enacted. Once beyond the boundaries of behaviour and recognition, of progression, things do not fall apart but we seem always to recreate new models of what is intended here. It is here that more-than-human engagement happens, not through the detailed analysis of theoretical positioning, but through initial anxiety, a sense of being drawn away from familiarity and toward the experience of what this is, what informs output. It can feel unsettling for all involved, a destruction of what is expected in these settings makes the seeking of other values and dynamic quality measures something we have to build ourselves. Yet it happens, immediacy of emotion and the emergence of a desideratum that brings insistence for purpose but a new purpose, not located in curricula and achievement, where grades become meaningless. Buchanan (2014, 12) talks of desiring-machines being best revealed by asking the question, ‘if desire produces, then what does it produce?’. The answer he gives is ‘objects’ not of physical form, but intuition (Buchanan 2014, 12). This relates to schizophrenic understandings, of an ‘alternate psychic reality’ (Buchanan 2014,13) although we need a less denigrating form of this as therefore delusional. What happens when the foundations of expected normality are removed is we see that delusion, fabricated and constructed reality, is exactly what the structures we are sat within are offering us.  Losing those, seeing beyond these and facing our own intuitive sense of what is happening and who we are in the world, is a lifting of the veil.  Considerations of our humanity do not disappear but are altered, opportunities to speak beyond the confines of curricula make possible class, race, gender, sexuality, not as debating points rooted in research or ideological positions but as the link we have with *zoe*, an interconnectedness with more than our positions in these hierarchies of delusion.

There was something about these places that attracted other educators, from other disciplines. It has become the most visited class I have facilitated.  The visits always bring questions around that tension between education-as-system and professionalism we have embodied/had imposed and that innate sense of attraction to this seemingly purpose-less mishmash of activity and liveliness, of energy without clear intent. Clutter as opposed to order, which sparks brilliantly in that part of the collective as if we had kicked open a door to another plane, an immanent plane on which our existence was connected to everything but not necessarily to our practice.

In recent months, it was this energy of Art Brut that attracted educators, as lecturers and students undertook industrial action as part of the 2022 University and College Union strikes over pay and conditions. Already apart from the conventional norms of the institution, defiled as ‘enemy’ by the political power machines, this energy was different again from the shadow institutional power of the union.  A different tier of wild freedom, that created poetry, held art workshops to develop banners that were often important spaces for emboldening thought, finding a new space to exist once we had thrown off our professional identities - temporarily, as a necessary act of resistance and activism. An exigency of new identities generated other ways of thinking and it was toward art, to clutter, to purposeless play that we found ourselves attracted. These spaces of not being othered, but recreating otherness as powerful and relevant is not merely within classrooms and picket lines. jagodzinski’s (2014, 159) ‘avant garde without authority’identifies the formation of a dark green ecology that helps generate new forms of response that expose *‘capitalism as the necropolitical death machine it is’*. This emergent avant garde creates better artists able to manage the capitalist infrastructure they live in, but that challenge the zombie walking dead (jagodzinski, 2014, 151) of people produced into production/ consumption entities without thought. It is this recognition of the processes being themselves part of the problem, not the solution, that means we must challenge what education looks like and how it is measured.  Deleuze’s identification of philosophy as a ‘formidable school of intimidation which (…) effectively stops people from thinking (Deleuze, 1994,13)points to our need to see within education the ways we must educate ourselves about the systems that seek to educate us.

Elsewhere, Balsam (2017) uses documentary as the basis for her call for a *‘reality-based community’.* It is through a recognition of reality as distinct from universality or truth that Balsam suggests the creative act can escape the ambiguity that leads to the potential for fascist imprinting (or the imprinting of any ideological fanaticism). Balsam (2017, 11) argues that ‘truth is not out there waiting to be captured – but reality is’.  Through Art Brut, and the better gateways we can create beyond it, we might move beyond theoretical conceptualisation of our liberty and freedom and be part of the shifts that make this manifest.  It is through community educational initiatives, in working class communities, through Indigenous knowledges, beyond the reach of the institutions that life-affirming knowledges exist and can grow. A more-than-human future must be embraced not only in universities, colleges and conferences but in the everyday realities and divergences that form the planet and all of us on it.

**Putting Posthuman Pedagogies to Work**

Our focus in this chapter has primarily been on the activation of posthuman pedagogic approaches in formal education spaces. However, such practices can also be used to promote new ways of learning across disciplinary silos in wider academic projects to develop different ways of knowing and understanding the world. Drawing on art, poetry and fabulation, and integrating these practices into research inquiries can help to bridge the epistemological divide between normative (positivist, social constructivist or interpretivist) methodologies and post-qualitative inquiry. Research-creation (Springgay, 2021) for example, brings together theory, research and art; it is:

an experimental practice that cannot be predicted or determined in advance. It is trans-disciplinary and is used by artists and designers who incorporate a hybrid form of artistic practice between the arts and science, or social science research; scholars attuned to the role of the arts and creativity in their own areas of expertise; and educators interested in developing curriculum and pedagogy grounded in cultural production. Research-creation is attuned to processes rather than the communication of outputs or products.

The positivist implication of data as information waiting to be found or taken shifts in Research-Creation to an emphasis on the creation of emergent processes, or ‘event-activities’ (Massumi 2011) which are pedagogic in nature. In this way, notions of research (discovering what is already there) extend to processes of learning (and unlearning), creation and speculation.

In one emerging example, I (Kay) am working on a research project aimed at understanding and furthering human-insect relations. Bringing together researchers from the Natural Sciences, Psychology and Education, we will put to work place-based, creative pedagogies alongside scientific and ecological knowledge to explore what happens when participants learn from hymenoptera (bees and wasps) as educators. Evoking the role of the ‘pedagogista’; an educational provocateur who works with teachers in the Reggio Emilia schools, my role here is to facilitate a space in which participants can think, not about pre-existing research or relations, but experiment in a way that re-imagines and allows new concepts to form. The pedagogista is ‘someone who is devoted to thinking about pedagogical possibilities’ (Vintimilla 2018, 21); they traditionally trouble and problematise engrained assumptions and ways of understanding education by ‘being-in-question’ and ‘putting-into-question’ (Vintimilla 2018, 22). Facilitating research and teaching spaces in this way can help to activate speculative and prefigurative modes which take lines of flight (Deleuze and Guattari 1987) away from the status quo of research and teaching towards new experiences and insights.

In another recent research project (Shukie, Holman and Small 2023) Peter led transdisciplinary approaches to art that provided the basis for collaborative encounters. Students and educators across Fine Art, Educational Research, teacher training and Art Therapy used art as a means of engaging with each other, of visiting galleries and collections and of challenging concepts of identity. The engagement with conceptual, classical and documentary art forms evoked monism, of action/ re-action, of seeing the same things, together, but recognising the diversity of perspective. The research through rhizoanalysis was of a ‘coming through’ (Cumming 2014, 5) and resistance to concrete notions of data. Those engaged have created work, film visual arts, soundscapes and collaborative encounters occur months after the first visits. In the subsequent and ongoing assemblages, the diversity in discipline morphed across our new engagements with other artists, concepts of art and classical forms of knowing. The encounters bled through with experience and creation and re-creation and also of challenge and repositioning of ourselves as working-class audience to working class creators and critical voices. The term *assemblage* itself (Deleuze and Parnet 1987) became both a construct of our experiences and a contention as we each came to it with previous understandings. To let these positions slide away or stand by our own interpretation was not important, as each allowed us to view our political, situated and contextual existence. It was important to feel those borders loosen and let engagement with others vibrate with other perspectives and values, challenging historical and contemporary visions of self. This was not about avoiding conflict or seeking space in which to become one harmonious space, but a challenging environment in which real world diversity is experienced and vital materialist responses are felt, and move beyond mere cognitive concepts.

**Conclusion**

The pedagogic experiments explored in this chapter demonstrate how artistic responses of all kinds can be introduced into the most unlikely curricula and research projects, via relational and community creative activities. Educators can thus become ‘cosmic artisans’ (Deleuze and Guattari 1987, 180); fabricating and fabulating new learning events which draw on shared energy and moments of heightened affect. Such transdisciplinary art practices not only teach different kinds of knowledge, but also instigate joy and community.

This current period of anthropocene (in which the environment has been changed irrevocably by human action) calls for education to be enacted in a different way; not as an activity that reinforces the nature/culture split, but as a ‘worlding’ process whereby the imagined divide between individual and environment is troubled, as humans and the material world are revealed to be relational and entangled (Gregg and Seigworth 2010). This necessitates pedagogies that converge instead of silo knowledges, expanding our human capacities so that education ‘dwells in the sensation of affect, rather than logic of representation’ (Dernikos et al. 2020, 1). Teaching thus becomes a ‘pedagogy of noticing’:

For pedagogues that means being on the look-out for unexpected connections, mixing together insights from different disciplines of knowledge production, continuously bringing the unexpected and uncanny into the classroom, as well as experimenting with different styles and subject matters in order to find whatever works. (Carstens, in Bozalek et al. 2018,  72).

The spatial and artistic pedagogical experiments shared in this chapter demonstrate how the troubling of material, human, and disciplinary boundaries can break our thinking free from the curriculum box, forcing teachers to consider instead the wider intra-actions of learning subjects who are not discrete units, but embodied and distributed agents, located within wider shifting and emerging assemblages. Lines of flight - where educators and students divert from planned learning pathways - are always present to one degree or another, in physical and virtual learning spaces alike. Noticing and elucidating these can be a form of resistance; a deterritorialisation (Deleuze and Guattari 1987) which disrupts fixed elements of a system, causing it to mutate in some way, even if there will be an eventual re-capture by hegemonic educational processes. When the teachers and students in this chapter began to heighten their attention in this direction, they gained further insight into the various components that comprise their educational assemblages and the different aspects of power (*potestas* or *potentia*) that were either restricting or enhancing their ability to act.

In this way, teachers enact convergence as an active practice, cutting transversally across methods and methodologies, activating affects that otherwise can be blocked in traditional, discipline-bound education systems. They therefore can become ‘affect modulators,’ as they become attune to, and respond to the way in which  ‘affects emerge, circulate, and enter into conflict’ (Snaza 2020, 113).  This shift suggests then, that education is always already posthuman; and what diffractive and affective pedagogies can do is reveal and offer ways to extend or work with these understandings. To borrow from Braidotti (2013), we cannot say, with any degree of certainty, that our curriculum has always been a human one, or that it is only that. Shining a posthuman light on our practice can reveal what education has the potential to do, should we just choose to explore what is not only possible, but what is always already present.

In a time of low energy, where limited ideas of what it means to educate prevail, Braidotti’s (2014, para.8) notion of ‘borrowing energy from the future’ requires us first to notice that in many ways, the future is already here. Donna Haraway (2016, 1) calls us to ‘stay with the trouble’ and eschew the future, a process which requires us ‘to be truly present, not as a vanishing pivot between awful or edenic pasts and apocalyptic or salvific futures, but as mortal critters entwined in myriad unfinished configurations of places, times, matters, meanings’. Waiting for (educational) revolution which may never come is a trap which can lead to cynicism or capitulation; instead we need to focus on the unexpected creations and educational collaborations that can be enacted in the here and now.

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