Chapter Three

Movement methodologies for postdevelopmental pedagogies: Or why movement play is important

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Abstract

Children's bodies are masters of movement, having grown with continuous tiny shifts as oxygen, water, electricity, synapses, hair follicles and other molecules actively propagate in every moment of becoming. Their vitality is constantly emerging and metamorphosing, being made and remade with the material and immaterial phenomena of the world within and around them, to the extent that bodies can never be completely still, fixed or stationary. It is no wonder that young bodies are compelled to move, extend, and expand into the spaces around them in endlessly productive ways. Yet movement in play is considered frivolous, out-of-control, messing around and not to be taken as seriously as 'real' learning, implying that the body cannot learn unless still. Developmentalist language continues to reduce the importance of movement where running, jumping, twirling, stomping, rolling, pushing and pulling are all considered ways to 'let off steam', ready for being 'calm', 'contained', 'regulated' and 'good'. I argue that collaborative dance play between children and adults opens possibilities for attuned artistic productivity that honours their historical and becoming bodies, with all the social, cultural, gendered, muted and intersectional differences these bring. This chapter challenges reductive tropes in developmentalism that limit learning by limiting movement. Thinking with posthumanism, movement improvisation is repositioned as an important pedagogy that enables children's bodies to become expressive even without words.

Movement as the essence of being

Movement is embedded in the play of all species. From fungi to folk, from amoeba to animals, the entangling and emerging of cells, organisms, microbiomes, and bacteria are vibrant, dynamic and continually transforming what exists. Whether it can be seen, felt, measured or not, transformation happens iteratively in every encounter, every instant, every molecule (Barad, 2007). Whilst patterns might emerge, quantum physics shows us that these are mostly unpredictable, unmeasurable and improvised at the point of emergence (Barad, 2007). In other words, movement is playful. This is never truer than in the bodies of young children. From the firing of millions of neurons in the brain every second to the pulsating of thousands of nerve endings just under every square inch of skin, to the mutual exchange of water, oxygen, skin cells, germs, gases and smells, the body is in continuous intra-play with the world (Barad, 2007; Gilbert et al., 2012). Through this reciprocal, iterative movement play, bodies of matter (human and nonhuman) learn, degenerate and regenerate in every moment (Haraway, 2016). Ultimately, movement, intra-action, entanglement and relationality is the nature of being (Barad, 2007). Without it, existence would cease to, well, exist. It is *that* vital.

Which moves me to wonder, therefore, why Western education systems privilege motionlessness (or, at least, corporeal compliance) as a marker of progress. Being an attentive student apparently means *not* fiddling, wriggling, jiggling, coughing, scoffing, shushing or sighing. I concur with Murris's concern (2016) that some educational environments associate particular behaviours (e.g. concentration, focus, thinking, writing, applying and trying) with a quiet, calm fixing of the body to a single location whilst its brain does the 'important' work of learning. Educators become trained to interpret motionlessness as code for success. It seems that the invisible stuff is allowed to move as long as the visible stuff remains static, does not disturb, disrupt, disengage or disempower the temporary regulation of corporeal entities that might move in unpredictable ways, given half a chance.

But could the stabilisation of the corporeal enable a greater mobilisation of the virtual? And, more importantly, can play/learning take place without moving? An assemblage of posthuman, feminist new materialist scholars think not. These molecular movers highlight how young bodies seem compelled to dance with the animacy of objects (MacRae, 2019), to unfold lines of movement which create deep connections between being and knowing (Hackett et al., 2020; Piscitelli et al., 2003), to express important ideas which cannot be articulated verbally (Hackett & Rautio, 2019), to deterritorialise what makes sense, using nonsense to make new kinds of sense (Olsson, 2009), to counteract normative views of the child by engaging in processes of becoming-imperceptible (Lenz Taguchi et al., 2016) and to prioritise sensorial movement for legitimising vital neurodivergent ways of being (Churchill Dower, 2022).

In this chapter, I delineate how developmentalist models diminish movement as a frivolous way to 'mess around' or 'let off steam', ready for being 'calm', 'contained', 'regulated' and 'good' (Hackett & Rautio, 2019; MacLure et al., 2010). Emphasising the ceaseless multiplicity of movements within and across all bodies (Barad, 2007; Haraway, 2016), I illustrate how the suppression of movement curtails children's agentic relations within the world. I argue that the disciplining of motion emanates from the pathologisation of bodies that move differently, which slithers just beneath the skin of society to oppress what isn't understood. I call attention to the urgency for different ways of moving in order to relate, to express, to sense, to make sense and to become-with[1] worlds already full of obstacles to being and knowing.

Sharing a movement-based research project with three-to-five year-olds in the north of England, I propose a speculative methodology that foregrounds improvisational ways of moving-with things, people, spaces and atmospheres (Springgay & Truman, 2018), where movement play is taken seriously as a form of growing and knowing (Truman, 2022). This is

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[1] I take encouragement from Truman (2022) in using a hyphen ('[verb]-with') to emphasise that attuning to different ways of moving requires going beyond *connection* (adult playing alongside child) to *intra-connection* (human becoming-with materials, textures, colours, smells, sounds, atmospheres, sensations and emotions that may not necessarily even have a name). These are undefined, non-hierarchical, unplanned encounters whose agentic power is distributed. In other words, agency comes from within the 'becoming-with', or the ways in which participation, learning and knowing grows between the players (human and nonhuman) as play emerges (McCormack, 2014).

a methodology that accounts for neurodivergent bodies whose minor gestures reveal that serious learning-in-motion is taking place (Manning, 2016) and that the only adaptations required are to the socially constructed concepts of 'child' and 'learning' (Murris, 2016). This chapter aims to challenge reductive tropes in developmentalist models of early childhood education that, paradoxically, restrict learning by constraining movement.

Situating play as improvised expression
Elsewhere in this book, authors delve into the various constructions around play, whether it is different from learning and how its integrity has been thrown into question, justified against educational standards or even put under erasure for the 'greater good' of 'intellectual' knowledge. I hold that movement play *is* learning and cannot be divorced from scholarly development since 'knowing is a matter of part of the world making itself intelligible to another part' (Barad, 2007, p.185). For this chapter, I will begin by stating my postdevelopmental ~~stand~~moving-points[2] that;

- play is an integral part of knowing and being in the world;
- as such, it is all about the processes of becoming, in relation with nonhuman as well as human elements, which are not within human control[3] ;
- its unpredictable nature makes play hard to measure by current educational standards;
- but this immeasurability is also its enormous potentiality since play's processes of becoming (growing/being/knowing) are productive of many worldings;
- and, as mentioned above, movement is vital in play.

In terms of what constitutes 'play', I propose that play is a *process of improvisational expression* rather than activities children 'do' with certain objects or materials at designated times. Jazz musician and educator, Lines (2018), describes improvisation as a way of 'opening out to difference [which] is both a pedagogical and artistic movement' (2018, p.52). Lines considers improvisation as vital for enabling new possibilities of exploration and creation to be experienced and kept alive. This is an activist process that helps to 'unsettle taken-for-granted, normalised and overcoded concepts of education that close down educative possibilities and differences.' (Lines, 2018, p.53).

I contend that play as an improvisational process is happening continually, iteratively and unpredictably as a part of children's agenting and relating – otherwise referred to as 'worlding' (Osgood, 2024). For instance, when a crack in the pavement triggers a little jump, which turns into a skipping-flying movement, the sensation of which compels a child to swing off an adult's arm as they walk along together. Or when the tiny squelch of mud squeezed through little fingers triggers an oral imitation game of noises squeezed out through puckered lips and sucked-in cheeks, each fleshy shape transforming to experiment with new sounds and interesting sensations which occur 'at the limits of language where vocalisations

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[2] I intentionally put 'stand' under erasure since there is nothing fixed in my posthumanist approach.

[3] Elizabeth Grosz urges us to 'understand the body, not as an organism or entity in itself, but as a system, or series of open-ended systems, functioning within other huge systems it cannot control through which it can access and acquire its abilities and capacities' (Grosz, 2004, p.3).

are not words or are so entangled with water, play and voice that they are not distinguishable' (Hackett & Somerville, 2017, p.384).

Water-mud-play-squeezing-vocalising-squelching are vital worldings in improvisational play as the world itself improvises their development (Barad, 2007). So why does improvisational movement-in-play seem so hard to legitimise and be taken seriously within educational frameworks?

Resisting individualist capability narratives
Play is often measured according to learning outcomes, delineating the products of play as skills-based or technical outcomes such as strength, coordination, proprioception and balance (Naughton et al., 2018), reducing the body to 'an object or instrument of a goal to be assessed' (Lenz Taguchi et al., 2016, p.708). But if we question whether the jumping-skipping-swinging child above has only demonstrated gross or fine motor development, it seems clear that this developmentalist perspective does not consider the whole story. Rather than act in isolation, limbs (or any body parts) are compelled to move in playful experimentation with forces, emotions, sensations and curiosities as they generate feeling for the world. But, if there are no words to describe these powerful forces of embodied momentum or sensory expression, where does this place the child along the trajectory of developmental progress? How can an educator answer this in any other way than to attend to the child's *ability* to do something *better* with their body today than yesterday? Furthermore, what happens if anything disturbs this linear trajectory, such as poor sleep, lack of nourishment, neurodivergence, mental illness, or living with everyday challenges? How are educators to account for the daily complexities affecting development?

Lenz Taguchi et al (2016) suggest that thinking about the child beyond the normalizing categorisations of expected educational behaviours requires thinking-with movement in subversive ways. It is possible, they say, to 'understand the moving, dancing Child as a process of becoming-imperceptible.' (Lenz Taguchi et al., 2016, p.706). Becoming-imperceptible does not imply becoming invisible but shifting from a focus on human purpose and mastery towards a more-than-human process of always being in movement and re-creation with the world. In this process, children's divergent bodies can be valued and understood as 'never striving towards or taking on a complete or definite form or wholeness, but always being in a creative process of differing' (Lenz Taguchi et al., 2016, p.707). This practice not only opens up encounters for children to explore movement sensations beyond the 'technical' limits of their own bodies, but it also invites different adult understandings of capability and possibility in relation to early childhood pedagogies.

Two questions arise from this thinking. Firstly, how can improvised play become imperceptible and *exceed* the expected practices of normalised, constrained, learning bodies to achieve curriculum goals which, in turn, reward 'good' bodies for their compliance? Secondly, how can imperceptible (i.e. indefinable, but not invisible), improvised play be taken seriously when its educational significance is articulated only through *what* is achieved or learnt and the body is defined as an instrument of the learning goal? Lenz Taguchi (2016)

describes the productivity of becoming imperceptible as often more virtual than physical, i.e. not constituted as children's bodies *performing* (developmentally appropriate) mastery but as participating in an event of connections, encounters, affects, sensations and digital materialities. Participation is not achieved by individual selves but by a constantly changing assemblage of bodily movements, functions, patterns, connections, vibrations and other forces. Through the capacities and potentialities of the larger body-assemblage, it seems human child and adult can experience feelings, sensations and actions beyond the limit of an individual body. Using the animating power of other bodies and matter, the human body becomes *more* differentiated, which is an important way to counteract simplistic categorising and conforming tropes. Learning, play and becoming are thus seen as parts of the same process in this onto-epistemological pedagogy.

However, despite the continual 'growth and development' of this assemblage, assessment regimes tend only to account for isolated, physical capabilities, which presents a conundrum. Fine or gross motor development can be evidenced through the strength and flexibility shown by little fingers as they manipulate mud, or the ways little legs can jump, hop, skip and swing. But there is nothing available to mark the processes of imagination, aesthetics, ideation, spontaneity, entanglement, absorption, experimentation or growing relations with the material assemblage because… how do you measure these qualities? And so, unpredictable, improvised, complicated, joyful, serious play becomes invisibilised by the very system that is designed to value 'learning' (Lenz Taguchi et al., 2016; Murris, 2016), and capability becomes reduced to a series of datafication markers (Roberts-Holmes, 2015). I turn now towards postdevelopmental notions of movement that might extend practices of becoming-imperceptible, animated, expressive and differentiated.

Postdevelopmental notions of movement
I jump on the roundabout of Barad's (2007) theory of agential realism, which holds that life and learning emerge from the entanglement of things-in-relation, emergences which are in continual change as they intra-act (relate) in every moment. Barad's premise that nothing exists a priori relations shapes the postdevelopmental thinking in this chapter, that children's knowing is entirely wrapped up in their being and that their bodies are continually becoming in relation with the materials, objects, people and environments around them. Furthermore, Barad proposes that, as all human and more-than-human matter is entangled, we/they are responsible to each other for whatever we/they become, or for how matter comes to matter. Barad describes this as their 'ethico-onto-epistemology' (2007, p.409 n.10), describing the nature of ethics, being and knowing as entirely intertwined and intra-dependent ('intra' suggesting there is no fixed boundary delineating the outside of entities and no separation between knowing and being). This notion, at the core of posthumanism, steps away from humanist, developmentalist or social constructivist theories in its assertion that 'knowing does not come from standing at a distance and representing, but rather from a *direct material engagement with the world*' (2007, p.49, emphasis in original).

That said, it is important to acknowledge a couple of developmentalist theorists whose work has offered a springboard to move some of these ideas forward. Chris Athey (1924-2011) is

renowned for her work in establishing schema as a way to think-with more open-ended movement trajectories that interpret children's relationships with spaces and materials. Schemas describe repeating 'behavioural' patterns that might be enacted by a child compelled by particular movements, either of their bodies or other matter, such as rotating, enclosing, enveloping, connecting, transporting, containing or transforming (Nutbrown, 2011). The intention of 'schema spotting' is to provide adults with ways to attune to and understand children's forms of thinking, offering alternative perspectives on children's fascinations and seemingly unfathomable behaviours (Atherton & Nutbrown, 2013). This helps educators identify how children play and construct knowledge by making connections, developing skills and solving problems, so that appropriate resources can be provided to extend increasingly complex learning modes.

Framed by developmental psychology, schemas help adults rationalise children's interactions in the world by imbuing everything with meaning, without questioning whether it *is* meaningful or not (or *whose* meaning is being applied). Whilst children's ways of being in the world can be fascinating, I argue that there are hidden consequences of this urge to continually rationalise movement through words. Firstly, interpretations risk being unsituated (divorced from a child's social, cultural and historical genealogies) especially where a child might not speak the common language of the setting. Interpretations can be over-simplified and biased, disembodied (cognitive rationalisations), representational (meanings can become imposed and fixed just because an action is repeated, missing its dynamic fluidity), and incongruent with what is important to the child. Ultimately, schemas are shaped by what white, western bodies might do in certain situations. As such, they might not attune to diverse social and cultural ways of being which runs the risk of perpetuating raced, gendered and classed ways of moving when used alongside curricular frameworks.

Similarly, dance education pioneers have attempted ways of describing and notating movement schema to link them more explicitly to learning (e.g. technical mastery (Laban, 1879-1958); emotional intelligence (H'Doubler, 1889-1982); language and literature acquisition (Oussoren - current); musicianship and concentration (Dalcroze, 1865-1950); listening, tonation and rhythmic co-ordination (Kodaly, 1882-1967)). Dance schema or notations continue to measure performative dance techniques by external observation of movement outcomes in relation to the isolated, human body. Whilst dynamic, these often focus on interoceptive and exteroceptive forces between bodies (e.g. velocity, speed, distance, direction, displacement, rotation, acceleration, momentum, inertia, gravity and friction) (Batson & Wilson, 2014). Nonetheless, recent efforts of contemporary dance educators have gone a long way to acknowledge the significance of creative, materialist, improvised play and the vitality of embodied learning (Batson & Wilson, 2014; Churchill Dower, 2020; Sheets-Johnstone, 2011). Later in this chapter, I offer an alternative idea for keeping schema-in-motion during data analysis which might open postdevelopmental thinking around schematic play.

Secondly, I draw on the work of hermeneutics philosopher, Hans-Georg Gadamer (1900-2002), who was an early proponent of exploring relational ontologies. Gadamer challenges

the Enlightenment idea of an objective, fixed truth, discussing the continual transformation of meaning that arises through a dynamic dialogue. By this Gadamer implies a back-and-forth of communication between participants that creates (and re-creates) meaning or, what he calls, a 'fusion of horizons' (Gadamer et al., 1986, p.xiii), whilst accounting for each participant's social, cultural and historical attributes. He relates this specifically to play and the arts, where he considers 'understanding' not as a prescriptive goal to be reached but as a processual enactment of communal participation and 'belongingness' between players/creations as the invitations and creations of the other are taken seriously.

Gadamer asserts that, even in repetitive play, movement is continually re-creating through this back-and-forth of participants. It is not so much a participation between human players as between the dynamics that arise in-between players or, as Nielsen (2021) articulates, it is what 'occupies the "space" between activity and passivity and gives rise to a co-constitutive event [which] comes to presence through the players' (2021, p.143). In other words, play's momentum arises through the interactions between ideas, sensations, imaginations, affect, and a 'creative responsiveness that plays off, on, and with the other's movement' (Nielsen, 2021, p.140). These interactions that take place in-between participants *is* the play itself. In this sense, the *movement* of play is its continual improvising across interactions (which Gadamer refers to as play having 'a certain leeway' (Gadamer et al., 1986, p.22)), without which play (and art) loses its creativity and is reduced to the mechanical (Nielsen, 2021). In other words, play-in-motion is constituted of the improvisatory qualities that arise through dynamic participation. It is this improvisational element that Gadamer considers the highest quality of freeplay, where it is always variable, full of potential and has a certain freedom *in excess* of everyday expectations. It is not so much a freedom *to* play as a freedom *from* the instrumentalised goals that attempt to mould normativity in the name of play (Nielsen, 2021). This relates closely to my own postdevelopmental notion of play-in-motion, as I will set out later in describing a fieldwork encounter which contains movement improvisations in relation-with other entities that might not have had "space" to exist within a developmentalist frame.

According to Gadamer, who uses extensive music and theatre examples in his work, play and artistic creations are alike in their *performative* enactment for and with others, even when improvised beyond the 'rules' or normative constraints of the game/artwork. In fact, performativity is always already entangled in the encounters precisely because of their improvisatory natures, i.e. their participatory value. Akin to Barad's notion of the intra-agential performativity of all phenomena, Gadamer holds that art/play exists only in relation with its audience/participants, but this is where any theoretical similarity ends. Gadamer contends that the 'subject' still exists in the form of the play/artwork/participants' interactivity, as if they are separate and bounded, clarifying his notion of performativity as a process of *performing* one to another for the aim of reaching communal understandings. Despite Gadamer's commitment to an intertwining of phenomena, this remains founded in the concept of causality, a significant deviation from Barad's entangled performativity which 'allows matter its due as an active participant in the world's becoming, in its ongoing intra-activity' (Barad, 2007, p.136) insofar as there being no bounded separations between

anything that relates, and that all matter has agentic potential which emerges within its intra-actions, rather than through human/social /discursive responsiveness. Hence referring to *interactions* rather than *intra-actions* in relation to Gadamer's concept of play-in-motion.

Gadamer also conducted a body of work on the ethics of communication, exploring how entities or phenomena can promote mutual understanding by finding ways to merge their biases, histories, and ways of knowing and being. Whilst this has an air of idealism about it, Gadamer nevertheless seems focussed on the knowing, being-with and understanding of difference. And, whilst not engaging in discussions around post-developmentalism, as such, Gadamer's position is, in some ways, close to Barad's theories of agential realism in acknowledging the interconnectivity of all entities in making intelligible the ethico-onto-epistemological encounters of the world. One wonders, had Gadamer been alive today, whether his thinking might have moved into the realm of the posthuman.

Attuning to minor movements in play

I turn now to considering how early childhood movement practices might move towards postdevelopmentalism by putting to work the concept of the 'minor'. Manning (2016) introduces the minor gesture not so much as an observable movement like a hand-wave, hop or jump, but as a force that courses through the body as it relates, intra-acts and becomes-with the world. These forces, or intensities, can manifest in unusual movements, sensations, vibrations, sounds and frequencies (referred to as 'gestures') which can be missed or go entirely unnoticed, because of their indeterminate and seemingly inconsequential qualities. To situate the minor, Manning describes how the 'major is a structural tendency' that dominates sociocultural values, theories and practices and suggests that the power of the minor comes in 'unmooring its structural integrity, problematizing its normative standards' (2016, p.1). Shortly, I will experiment with what the minor provokes in a clip of video data and how this might problematise normative (developmentalist) practices that are easily returned to in trying to make sense of the unfamiliar.

In her thinking-with the dances of animacy between young bodies and materials, MacRae (2019) contends that the major structures in early education work against the improvisational variabilities of the minor in that they 'lead us to read backwards from the endpoint of, for example, a play event, with an understanding that what composes the event is inevitably leading to the resulting end state' (2019, p.5). This produces the determining 'retrospective explanation' for traits and behaviours which suppresses the emergence of indeterminate, unpredictable minor expressions.

Unpredictable and immeasurable as they are, these expressions are what Manning would call the *excess* of concepts, methods and words, and encourages using speculative methods that are 'committed to what escapes the order, and interested in what this excess can do [recognising] that knowledge is invented in the escape, in the excess' (Manning, 2016, p.38).

Like Barad, Manning challenges Anthropocentrism by suggesting that matter, objects, spaces and atmospheres all have agency which is animated through the relational dynamics across

human-nonhuman entities (which are always already entangled). It is by attuning to these minor frequencies, agentic animations and improvisational expressions, Manning proposes, that allows humans to experience the affective intensities – or vitalities - of various phenomena (Manning, 2016). McCormack (2014) stresses that minor encounters 'have the potential to become something more than they actually are. The trick is to find ways of thinking this excess. This is fundamentally a matter of participation' (2014, p.35). Participating in processes of attuning to the minor is not always easy because, as I have set out above, relational encounters never stand still. To be open to encounter the *excess* rather than the *expected*, I propose a careful preparation by removing whatever compels towards the familiar, the distancing, separating and categorising of elements and instead, speculatively setting up the conditions, schedules, materials, atmospheres, spaces and attitudes for participation (Springgay & Truman, 2018). It is not just a molecular movement of corporeal bodies but of ideas, imaginations, passions and electricity to experiment with the unknown, as I will explore with my data in the next section.

And since minor gestures can be a major language for children whose ways of knowing and being in the world are considered non-conformative, different or neurodivergent, this process of attuning becomes very important in our educational practices. Divergent bodies may be more attuned to sensorial affects within their worldings, with a heightened perception of motion, felt senses and touch in relation to proximal bodies (Batson & Wilson, 2014; Sheets-Johnstone, 2011). Therefore, not only does attuning to the minor open spaces for improvisational expression between young children and their preferred environments, materials and objects of play as their excesses emerge, it must surely open spaces for neurodivergent adults to feel more closely entangled in their children's play.

Experimenting with attunement to minor movements
I will now explore an encounter that took place during a doctoral research project of dance improvisations with 3-to-5-year-olds, who sometimes do not speak. Taking place in the UK during the covid lockdown of 2020, and with nurseries and schools temporarily closed, the project was moved into a Zoom space for improvised movement play sessions with participating children and their parents. This section will mobilise data from a ten-minute recording of one of these sessions where families had turned up to play, dance and intra-act with materials and each other, without words.

Whilst the medium of Zoom (and the recording) enables me to attend to minor gestures that might have been missed during the session itself, it is nevertheless problematic in being designed to capture and represent data in a human-centric way, with the onus on human faces and voices. MacRae (2019) attends to the risks of intensifying the adult regulatory gaze which is neither supportive of decentred posthuman practices nor of improvised expression in this situation.

Nonetheless, I use a speculative approach to 'reading' the data (Springgay & Truman, 2018) whereby I open myself to become-with what passes across the video and allow its forces, sensations and resonances to impact within my body. I prepare for this by firstly removing

the adult talk. I then crop the video canvas to reveal only the bodies and materials intra-acting in one Zoom-window and, further to this, I crop out the faces. This is not an attempt to dehumanise my participants but to place an artificial constraint on my own body and reduce the dominance of my embedded bias towards interpreting words or facial gestures. I approach this experimentally without expectation of meaning, just a curiosity as to what might happen. Without the adult talk or the distraction of action from other Zoom-windows, I forget 'what comes next' and find myself more able to tune in to what is taking place in the moment, as if experiencing it for the first time (Manning, 2016).

I bring my body to focus its awareness completely on the first ten minutes of video. Turning up the volume on this short snippet, my body witnesses the muffles and scuffles of body parts, materials, objects, utterances moving together-apart (Barad, 2007). What occurs in this process is an increased sensitivity to the visible, audible and sensational forces intra-acting and leaving traces of excess as they resonate within my body (Manning, 2016). These excess residues are at once chemical, physical, sensorial, guttural, emotional and ephemeral. It would not be possible to describe the experience of such resonances here without reducing their dimensionality. But what occurs to me whilst being-with these resonances is a strong sense of 'seeing differently' the snippet being played out. Intimate relations – minor gestures - between body parts, forces and objects come into focus in a way that I have not experienced before. They become less visual, and more felt. I write-with the affects of seeing-feeling-differently, foregrounding the forces and movements intra-acting within the play, and offer some of this writing to you next.

In trying to write about intra-activity beyond a developmentalist canon, I am still left with the problem of naming. This process invokes categories which are bounded, situated and often stop any excess in their tracks. Nonetheless, I proceed with names of things as they emerge in the encounters, but stress that this is not an attempt to anthropomorphise or characterise materials, objects or body parts, but rather to offer an alternative way of experiencing their animated relations within the limitations of words. I also experiment with Athey's schema to foreground the movements of the excess across these agentic relations (human and nonhuman). I do this by offering //provocations// for the intensities, sensations and movements of schema-in-motion, including those resounding within my own body. These suggestions are not intended as representations, interpretations or categorisations of named behaviours or forces, but simply as visceral inklings that may engage the reader differently in the experience[4].

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[4] Note – reading the next section out loud might help to experience a visceral engagement as the breath vibrates, entangles and moves-with the encounter emerging below and deep within.

Figure 3.1: Schema-in-motion between Shoes 1 & 2, Big hand and Little foot, image by Ruth Churchill Dower

Big Hand, Little foot, Shoe, and Rabbit schema-in-motion

Shoulders are rising and… falling and… rising and… falling and…	//respirating-expanding-connecting-swaaaaying//
With each rise, Elbows lift out very slightly, then fall in again, as if they are accentuating their connection to Shoulders. Their gentle, rhythmic sway highlights the alert stillness of Rabbit, sitting patiently, ears cocked, attending to the decreasing-increasing proximity between Elbow and itself.	//Shhhhhh…and????//
Fiddly fingers (that already know Rabbit awaits) twizzle the hook on Shoe 1 with playful tactility, flicking and flapping it round and round.	//roundabouting-twizzling-materialling-feeling-hooking//
Shoes 1 and 2 are new, both to themselves and to this family. They arrive full of surprises in form and function – not 'just' shoes to be worn and trodden on but rubbery soles to be felt (touched) and felt (touched by). Pride swells in their newness.	//Mmm? Oh! MmmmHmmm//

Big hand swoops in and engulfs Shoe 1, appealing to it to become moulded to an expected shape around Little foot. A shape it has known already in its design and being embedded into its history. Big hand brings its force of bigness to bear and urges a closer proximity between Shoe 1 and Little foot, as if Shoe and Little foot will suddenly coalesce and become compelled to intimacy. But Little foot remains steadfast at the end of Straight leg, unbent, unbending, unwilling to relinquish its freedom from this weighty constraint. Shoes 1 and 2 are heavy and stiff. Little foot is soft, gentle and yielding. They are not happy bedfellows.	//swooshing-enveloping-moulding-urging//
	
	 //pulling-pushing-squeezing//
	
	 //UH-OH-NOPE-refusing-resisting-unyielding//

However, Fiddly fingers, and Shoe 2 are undoubtedly enjoying a different force of tactile intimacy that cannot be unfastened, at this stage. One set of fingers becomes tucked inside Shoe 2, pushing up against its hidden rubbery vaults, whilst the other set gently rub the outer rubber sole in a curious skin-rubber investigation. Fiddly fingers smooth their way from heel to toe, along the sides, down the sole, fingernail flicking each gutted rubber tread one by one. Then feeling their way back up the other side and round the smooth toe box again.	//stroking-juddering-scratching-flicking-rubbering-juddering-smoothing-smudging//

Until, that is, Rabbit jumps back into Memory's eye, prompting a feelingness of greater intimacy and new ideas. In a flash, it is decided. There is no reason on earth why all intimacies should not be brought closer, all sensations heightened, all investigations furthered. Without a word, Rabbit hops inside Shoe, closely cosseted by a whole set of fingers and the three become animated in a playful hand-walk around the floor.	//HOP-HEY!//
	
	//re-vitalising-alerting//
	
	//hopping-clopping-thudding-clasping-hopping//

Big hand folds itself around its other half and watches on from the safe distance of Lap.	//UH-HUH//

Time is not present during this encounter except at one point when Fiddly fingers are bidden to play a game with others attending the session. Shoe 1 and Rabbit are discarded whilst Body bundle performs to task as bidden, looking around to find something blue to dance with. Rainbow's blue quality invites attention and is quickly put to work, but not in its traditional role as an arc, as Big hand suggests. No, it is up ended and mobilised as a seesaw in which Rabbit might want to dance. Rainbow's seesaw movement is exacerbated by its slidey edges, slipping uncontrollably across the floor, but Rabbit leans into Fiddly fingers to keep it centred, ears still cocked.	//stiffening-tensing-performing-'gooding'//
	
	//relaxing-improvising-noticing-blue-anew-upending-risking-solving-exciting!//

Big hand wants to join in and, for a few moments, Big hand and Fiddly fingers hold either end of the upside-down rainbow, performing seesawing-with-Rabbit for the admiring onlookers. Holding turns to pulling and, as Big hand suddenly lets go of its grip, Rainbow flicks sideways and Rabbit is inadvertently catapulted into the air for an unexpected flight across the room.	//blueing-seeing-sawing-swaying-sliding-slipping-grabbing-whoopsy-flying!//
Time is halted in its tracks. It stands still, holding on to Discomfort for a split second. Then, Fiddly fingers, Little foot and Body bundle (in that order) immediately mobilise themselves to fetch Rabbit back into close proximity. With impeccable timing, Shoe 1 shuffles up and under the side of Rainbow to steady its seesaw motion with its rubber toe cap, ensuring no more flying for Rabbit.	//freezing-squirming-wondering-diverting-re-mobilising-jumping-re-solving//
That done, Shoe 2 jumps back into the lap of Body bundle and offers up its smooth, rubbery tactility to Fiddly fingers once again. At this point, improvised play resumes and time begins again to slip away quietly until it is nowhere to be found.	//calming-cuddling-smoothing-relaxing-enjoying-stilling-being//

Figure 3.2: Schema-in-motion between Shoe, Fiddly fingers, Rabbit and Rainbow, image by Ruth Churchill Dower

Discussion – the pitfalls of moving the minor into practice

In the encounters that unfolded in the above snippet, it would have been easy to fall back into familiar territory and describe the fine and gross motor skills in trying to put on and fasten the shoe, or how appropriately the child's body responded to the task of dancing with something blue. Such assessments would likely have resulted in outcomes 'not met' according to the mechanical mastery expected of this young body. Yet, such an assessment would have missed the 'successes' of movements borne of numerous improvisatory minor expressions and relational forces intra-acting.

The experiment with my fieldwork data was an attempt to keep schema-in-motion. Rather than interpreting fixed behaviours such as 'trajectory' or 'enveloping' schema, or 'representing' a child's agentic prowess through a particular adult bias, I focused not on the child but on the relations between the many bodies involved in each intra-action. With every attempt to assign languages or notations to the myriad minor movements taking place, the same problematics emerged that I voiced earlier about schema theory. How could it be possible to artificially separate/isolate the intra-actions from their multiple doings and meanings which, as I have discussed, are continually transforming and re-creating anew in their iterative entanglements? My sense is that it is neither possible, nor useful, to articulate minor movements which are not *performed for* interpretation but are motions-in-play for the agential attraction of being compelled to improvise together – *part of the world making itself intelligible to another*.

What does seem both possible and useful is the deterritorialization of spaces for motions-in-play. This requires preparation in removing expectations of the familiar and re-positioning in readiness for the unfamiliar – in this case, focussing only on the lower half of the video clip where the animated relations were developing between foot-shoe-rabbit-rainbow-hand. Even this situation proves problematic as the mode of video, no matter how deterritorialized the perspective, continues to encourage a state of watchfulness – an optic viewpoint which dominates the felt experience (MacRae, 2019). Nonetheless, the somewhat failed experimentation of re-composing Athey's schema with multiple relations to invoke the feltness, or vitality, of minor movements might offer a proposition towards the foregrounding of what matters in play.

In this encounter, movement generates vibrations, rhythms, disturbances and new trajectories which, in turn, stimulate new ideas and unfasten different imaginings. The lack of expectation

as to 'how' to be, to move, or to dance, seems to open a space for experimentation from which humour, affects and sensations arise that seem to both satiate and stimulate further curiosity. Each element plays an important role in the relationality – the shoe rubber that invites sensorial connectivity with its smooth matt surface, unusual smell and stiffly ridged sole; the slidey-ness of the upside down rainbow which seesaws and swings around beyond human control; the lightness and malleable steadfastness of the rabbit to be moved as desired; the highly attentive fingers that invite and reciprocate so many folds, tucks, twists and twirls, and that resist and fight the obstructions to these satisfying movements. In their entanglements, these become much more than movement behaviours; they become distributed agentic dances, developed through affective attunements to 'atmospheres, halting moments, sensations, and uncomfortable effects' (Osgood, 2024, p.112). Going beyond individually assigned schema, are these fingers not learning the complex arts of affective and sensory reciprocity through play?

Yet, even here I risk segmenting bodies and materials into objective play parts, measuring the singular progress, rather than the manifold processes - such is the embedded nature of developmentalist reasoning within educational research. Postdevelopmentalism is a risky business! Young bodies may not need to be at the centre of learning as much as older bodies might think. Improvised processes of expression and excess move towards very different kinds of progress unmarked by human standards and units of measurement (Manning, 2016). They don't require so much an analysis of *what* happens but *how*, and in doing so, can value the entangled, biassed and historical improvisation of all participants, including researcher and researched.

Figure 3.3: Schema-in-motion between Shoes 1 & 2, Fiddly fingers and Body bundle, image by Ruth Churchill Dower

Perhaps there are different onto-epistemological considerations for attending to the minor gestures in practice, noticing the excesses *of* relation that become expressed *in* relation? I offer some thoughts on what these might include, without any prescriptive intentions, based on experimentations during my fieldwork and afterwards in attending differently to the data produced:

- Resisting the compulsion for familiar, universal, standardised ways of knowing.
- Forgetting outcomes. Taking whatever is happening as the starting point.
- Participating by immersion (with energy, openness, connectivity, attitudes - not always body).

- Relinquishing the expectations of *expert* for the possibilities of *player*.
- Practising being-with the unfamiliar, noticing its discomforts and intensities, and trusting that the emergent processes will carry the play-in-motion forward.
- Resisting interpretation, understanding or knowing.
- Noticing the minor expressions in improvised play, without comment.
- Leaning into movements that are not consciously directed. Sensing the electricities, intensities and vitalities of nonhuman as much as human participants.
- Allowing the felt sensations, registers and resonances to be valued even (especially) when they cannot be articulated.
- Considering the *how* rather than the *what* in divergent ways of being and knowing.
- Remaining open to excess – what is produced beyond the body, words, or reason – even beyond the encounter.
- Continue to ask questions and only expect more questions!

This type of research seems to ask the unanswerable: How do I decentre my embedded developmentalist ways of being/knowing in order to think postdevelopmentally in ways that attend to the important, minor gestures of learning? What does it take to displace my 'self', my subjective, regulatory gaze and begin to be/know through seeing and sensing children's worlds differently? Minor encounters are not easily described in words. But sensations, feelings, thoughts, wonderings and inklings may nonetheless have strongly felt impacts across bodies. No hard boundaries of certainty but plenty of rabbit holes of curiosity down which to disappear! How exciting. How interesting, stimulating, provocative, motivating, and compelling this sort of learning (and teaching) can be. Playful knowing that moves and moves us.

Through attention to the minor, educational practices can become subtly transformed. Planning is focussed on the processes of becoming-with (the *how* of improvised expression) rather than the outcomes (the *what* of meaning and reason), shifting the focus to the possibilities emerging in each encounter. Becoming-with is about becoming-familiar with the unfamiliar; getting to know the unknown; creating conditions for curiosity rather than clarity (McCormack, 2014). These practices 'counteract the idea of bodies being performed to become perfected and definite wholes – developmentally appropriate child bodies' (Taguchi et al., 2016, p.710). Rather, they open up possibilities for children, educators, artists to become part of an assemblage that, 'in its complexity never takes on a final or definite form or wholeness, but engages in exploring new and other possibilities of what a body might be and become productive of' (ibid).

Conclusion - Pedagogies that mobilise

In this chapter, I argued that movement is the essence of being, and that attuning to its vitalities and minor gestures can generate relations of excess, beyond that which can be measured or articulated. I discussed how developmentalist approaches whilst designed to support children's open-ended play, tend to work in service of cognitive goals and discipline divergent bodies whose ways of knowing and sensing the world often happen through

movement (Hackett & Rautio, 2019). In considering ways to counter these narratives, improvisational expression was offered as a way of becoming unfamiliar with the familiar, and familiar with the unfamiliar! This repositioning creates possibilities for children to become imperceptible, in terms of shifting the locus of agency from the child to the unlimited intra-actions with materials, spaces, affects, sensations and other vitalities entangled in the play (Lenz Taguchi et al., 2016). I also explored how resisting majoritarian curriculum dominance and foregrounding indeterminate minor relations like this is important for creating the conditions for new ways of knowing and being to flourish (MacRae, 2019; Manning, 2016; Murris, 2016). This seems like a timely issue in the context of increasingly stretched time and space for play as learning environments become ever more crowded, static and assessment-led (Roberts-Holmes, 2015).

Pedagogies of becoming-with, improvising, and sensing the minor forces between players, movers and relationalities requires participation in all its forms. This has important implications for educators and artists in the field of early childhood, in terms of creating a momentum for movement to be noticed, valued and legitimised in pedagogical approaches. This is not without its challenges, as I experienced in attempting to articulate the schema-in-motion, or the movement relations, happening during a short period of movement play. But, as I found, by keeping the focus on the agencies and intensities of movements, early childhood pedagogies can become more sensitised to minor gestures and find generative ways of animating them (with bodies, materials, environments and time if not with words) as part of the everyday schema-in-motion. Ultimately, this requires a willingness to challenge prescriptive pedagogical languages that interpret movements as instrumental, mechanical, or developmental, and a determination to remain open to the excess of what play-in-motion can do.

Focussing on the relationality of minor movements and visceral sensations may seem limited, offering no fixed objectives or promises of transformational solutions in what is a highly charged agenda with much riding on children becoming (economically, educationally and culturally) 'successful'. But by making space for alternative expressions that do not centre the child but focus on the relationalities in continual movement across bodies-spaces-materials-atmospheres-pedagogies, this speculative method enables a highly ethical, activist encounter through which to challenge 'unspoken identity politics [which] frame our idea of which lives are worth fighting for, which lives are worth educating, which lives are worth living, which lives are worth saving' (Manning, 2016, p.3).

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