

# **Playing with mud- becoming stuck, becoming free?...The negotiation of gendered/class identities when learning outdoors**

In recent years there has been a growth in outdoor learning opportunities for children of primary school age in part due to concerns that children spend less time outdoors and have become disconnected from nature. This paper draws upon ethnographic fieldwork conducted during the school year 2014-2015 in a school garden and two forest schools with children aged 3 to 11 years old. This paper explores how mud is used to form gendered and class based identities through its management and social construction as dirt. The empirical research finds that the mud kitchen and wearing of waterproofs worked in part as assemblages to govern individuals and their experiences through the creation of cuts between bodies and mud. Yet, there were times when children's encounters with materials exceeded their intended pedagogical function and resistances emerged.

Keywords: class, gender, governance, forest school, outdoor learning, mud kitchen.

## **Introduction**

In the United Kingdom, over the past 2 decades there has been growing investment in outdoor learning for children attending primary school. This has been related to concerns that classroom based learning is restricting play and failing to facilitate children connecting to the natural world, due to its routines, spatial design, structures, boundaries and curriculum (Waite and Rea, 2007). Since 2011 there has been a rapid expansion of forest schools (year round outdoor learning with learners regularly and repeatedly visiting the same site usually for at least six weeks) in the United Kingdom, as well as a proliferation of other outdoor learning opportunities, including school gardens and allotments (Waite, 2017). The current outdoor learning movement draws on ideas about the importance of connecting children with nature (see Gill, 2007; Louv, 2005; Monbiot, 2013).

Outdoor learning encourages children to connect with the environment through touching and feeling materials that are deemed to be natural (Knight, 2013). Mud is often identified by outdoor educators as an important matter that shapes children's bodies in positive ways and through which they learn about the more-than-human (Bilton, 2010; Keeler, 2008; Knight, 2013). Mud is seen as therapeutic as a soothing, relaxing and calming material, affording play due to its tactile qualities, stimulating imaginations and a matter that can be readily experimented with (*ibid.*). This paper draws upon ethnographic research from three sites of outdoor learning including 2 forest schools and a school garden to examine child-mud relations. The analysis using governmentality (Foucault, 1991; 2002) and performance theory related to the production of cuts (Barad, 2007) [see the next section of the paper] explored how mud is used to form gendered and class based identities through its management and social construction as dirt.

There is an attentiveness in this paper, like that of previous work in Children's Geographies, to matter and its agency (for example Änggård, 2016; Rautio, 2013a, 2013b; Merewether, 2018). Yet, often in previous studies of more-than-humans by children's geographers, the more-than-human becomes an entity whose affects are wholly positive upon children with more negative aspects of child and more-than-human relations, such as harm, exclusion and restriction, paid little attention. Horton and Kraftl (2017) have already raised concerns that theorisations of and explorations with social-materialities often overlook politics, harms, violence and exclusions that are co-produced in/through social material processes. This study makes an important contribution to theories of materiality and children's geographies by showing how more-than-humans and discourses combine stimulating the performance of gendered and class based identities.

Through examples, such as playing in the mud kitchen and wearing of waterproofs, this paper shows how mud governs individuals and their experiences through the creation of cuts between bodies and mud. This development of boundaries enables the performance of discourses

surrounding the healthy outdoors in a clean way that allows the Cartesian divide between human/nature to remain intact. In this paper, I explore how adults structured children's encounters with mud by designing a specific space for such engagements- the mud kitchen. I then move onto to consider how concerns about children becoming muddy generated a cut that attempted to separate children's bodies from mud and the use of assemblages to limit children's muddy encounters.

### **Theorising bodily and material entanglements**

Scholarship on new materialism has shifted the way social scientists think about the world, moving away from Cartesian ontologies of the individual as an isolated and separated subject through the decentring of the human and the foregrounding of more-than-humans (see Barad, 2007; Bennett, 2010; Braidotti, 2002; Haraway, 1991). This scholarship pushes us to think differently in ways critical, messier and inventive about our relations with more-than-humans. Matter in this paper is not seen as mere stuff, as inactive until someone/thing else acts upon it bringing it into action and as simple an inscription of culture and meaning. This paper draws upon a more-than-social approach that moves away from Cartesian thinking where the world is thought of as being made from discrete objects.

In particular, it draws upon Agential Realism, a way of theorising the world that challenges divides between human and more-than-humans and that things exist as separate entities (Barad, 2007). Life for Barad (2007) is so entangled that it is impossible to separate different matters into definable objects or subjects. Therefore, it is not possible to separate children and nature into bounded entities recognising their entanglement, so children can no longer be seen as disconnected from nature. Barad (2007) challenges how we conceive of how things become into being. Usually, we think of things becoming through a process of interaction, whereby they are individual and independent entities that pre-exist their action upon another. Instead, Barad (2007) calls for us to consider how things intra-act with phenomena co-emerging simultaneously into being because of their encounters with others, and therefore individuals

only exist within phenomena. Through this lens agency is "... a matter of intra-acting; it is an enactment, not something that someone or something has" (Barad, 2007:112). This has important implications for how we consider human bodies, as they cannot be merely physical containers to be moved by the mind. "Bodies do not simply take their place in the world ... rather 'environments' and 'bodies' are intra-actively constituted" (Barad, 2007: 170). The way that the body is conceptualised in this research draws into its frame Foucault's (1991, 2008) work upon governmentality and Butler's (1993) notion of performativity, which are reconfigured by Barad (2007) to include more-than-humans as entangled and involved in our bodily performances as active material-discursive agents.

The work of various theorists within the New Materialist paradigm including Barad, Bennett, Braidotti and Haraway has been applied by Children's Geographers in examinations of material and bodily entanglements (see Rautio, 2013a, 2013b; Änggård, 2016; Merewether, 2018). Rautio's (2013a) applies the concept of intra-action to help us rethink our connection to more-than-humans through the practice of carrying stones. We may be drawn to a stone, due to its particular aesthetic or/and tactile qualities and therefore the stones in themselves have agency to shape our behaviour. This challenges our understanding of how we engage with the more-than-human from interacting, with turns taken in the affecting of each other; to intra-action with phenomena co-emerging simultaneously to come into being because of their encounter (*ibid.*). Änggård (2016) shows how intra-actions in which children, matter and discourses are entangled and illustrates how phenomena change each other. During observations of play activity she finds that materials can take on new unexpected meanings or at times they are attributed with symbolic meaning because it is reminiscent of something else (*ibid.*). She concludes that more-than-humans had agency shaping events, with intra-actions between matter and children providing opportunities for the construction of resistances that prohibit action (Änggård, 2016). Änggård's (2016) work shows how childrens lives are entangled with the more-than-human and that it can have real affects upon their mobility, relationships, experiences and understandings of/in the world. This paper further cements those undertandings of more-than-humans as

having agency, being entangled with and shaping our lives, but building upon Änggård's (2016) work it shows how more-than-humans and discourses through intra-actions combine together to stimulate gendered and class based identities.

This paper draws upon governmentality as a way of theorising how children's bodies are managed within the outdoor learning spaces. Governmentality involves the exercise of power over bodies, the bio-political regulation of a population and self-management through care of the self (Foucault, 1991, 2008). It involves the development of measurements and technologies that are designed to know, shape, guide and govern the behaviour and aspirations of others and the self through practices and programmes (*ibid.*). Through internalising discourses related to health and wellbeing individuals mould their behaviour to comply with norms created by the psychological sciences, whilst simultaneously applying them to others (Rose, 1999). If abnormality is discovered, for example if a child does not follow the expected stages of child developmental models, then this enables bio-power to act upon individuals so that they modify their behaviour and bodies to the norm.

The conceptualisation of bio-power in much of Foucault's work restricts agency to humans and fails to take into consideration how more-than-humans are entangled with and shape people's lives (Barad, 2007). By privileging the social Barad (2007) argues that matter is simply reduced to an end product rather than an active co-producer of knowledge, power and bodies. Thus, this paper draws upon a broader conceptualisation of bio-power that goes beyond the human and it sees more-than-humans as mattering in the production of knowledge, power and identities. Through Barad's work life is so entangled that it is impossible to exist as bounded and distinct individuals; things exist as phenomena are knotted together in a mesh of animals, plants, objects, materials, people, discourses, knowledges and ideas. When people try to untangle phenomena into entities, things, species and other categories they are sorting them out and as such making cuts between what is included and what is excluded. Thus, through Barad's (2003, 2007) work the Cartesian divide between humans and more-than-humans is a

cut, an artificial boundary that is enacted and largely unchallenged in daily life. Discursive-material relations and the boundaries these produce will be explored later in this paper through mud-child and waterproof-child cuts

### **Sites of research**

The sites of research included two forest schools and a school garden. Children aged 3 to 11 years took part with 47 girls and 28 boys participating, the gender imbalance was due to the lower number of boys taking part in forest school at one location. There is though no fixed definition of what a forest school is; generally they involve year round outdoor learning with regularly and repeatedly visits to the same site (usually for at least 6 weeks) undertaken with a qualified forest school teacher (Forest School Association, 2011). Some forest schools are connected to mainstream primary schools, whilst others are independent; they can be fully integrated into the curriculum, be extra-curricular, take place in specially created areas (such as school ponds and gardens) or already established sites (such as local woodland) (Williams-Siegfredsen, 2011). Much of the existing forest school research focuses upon practices and educational/health/wellbeing outcomes, and lacks critical analysis (Leather, 2018). Data from studies of forest schools is often collected from interviews and questionnaires with practitioners and often fails to involve children who take part as such it becomes reaffirming of anticipated beneficial outcomes of attending forest school (*ibid.*).

The 2 forest schools, Meadows and Woodlands, were attached to primary schools and took place in woodland located in the school grounds and both had a specialist forest schools teacher who ran outdoor activities throughout the year.

#### ***Meadows forest school***

Meadows forest school is located in Greater Birmingham in an urban housing estate. The school is situated in an area of high ethnic diversity and the school reflects this diversity with a high proportion children from BME families (ONS, 2013). Meadows forest school was located

in a wooded area in the school grounds, previously a garden, on the edge of the playing field the site was relatively small and constrained. Meadows forest school was an extra-curricular activity ran after school, usually involving 6 sessions in a course that lasted as many weeks, by a teacher at the school called Anna. Each child at Meadows school was invited to take part in the forest school with their peers from the same year group and there was a cost of £6 for the whole course. The numbers of children that attended the forest school varied from year group to year group, with up to twenty children attending from year 2 (this was Anna's class), whilst 8 to 12 children attended for years 1, 3, 4, 5 and 6. The session would last for about 1 hour 30 minutes, beginning with children playing chasing and/or teamwork games on the school field. After games, children would return to the fire square where they would have a cup of hot chocolate and a biscuit. At the beginning of each session, Anna would tell children about the things that she deemed to be risks and run through a set of rules, before suggesting some activities that children could do. Children would build dens, sometimes they would sit by the fire, do mud painting, use the mud kitchen, play chasing games, make things and homes for bugs.

### ***Woodlands forest school***

Woodlands school is located in a large new town in the West Midlands, England, within a large urbanised housing estate. The school is near to both the town centre and a large park, which is visited by the school on a regular basis. The school has a diverse community with children coming from families who had migrated to the United Kingdom mainly from Eastern Europe and West Africa. The area was undergoing regeneration, which was focused upon the neighbourhood shopping centre. The forest school at Woodlands school had been part of the school's curriculum for the past five years and compulsory for all children. A dedicated forest schoolteacher Carolyn and assistant Lorraine ran Woodlands forest school. The forest school is located in school grounds upon a mound covered with mature woodland. The wood was fenced off and gated so children could only access it with adults, and when forest school was running a significant area of the wood was deemed out of bounds to children. Each class, 25 to 32

children, would do a half term (5/6 weeks) doing out of the classroom activities for 2 hours, which included forest school sessions, visits to local museums, library and the park.

The structure of the forest school was designed around the 3 key stages that comprise the primary school curriculum in England: early years [nursery and reception classes with children aged 3 to 5 years], key stage 1 [years 1 and 2 with children aged 5 to 7 years] and key stage 2 [years 3 to 6 with children aged 7 to 11 years]. Each key stage has a prescribed set of knowledge and skills that each child is expected to have learnt by the end of that stage and therefore what was learnt within Woodlands school would change depending upon age. Early years children would be given the choice of three or four activities that they would do with an adult, but if they wished they were allowed to initiate their own play. Children in key stage 1 and 2 would be told what they would be doing (such as fire lighting, Stone Age house building and plant identification) before being placed into a small group, usually accompanied by an adult. The session would begin and finish in the fire square with Carolyn leading explanations, questioning and a reflection on what children had done and learnt.

### ***Garden school***

Garden school is located in Greater Nottingham and near to a university. The school community is very diverse, as children are from a number of countries with a high percentage of children identified as EAL (English as an Additional Language). Garden school has a highly mobile community with a significant number of children attending the school for a few years before returning to their country of birth. Fieldwork took place in the foundation stage unit where the school day was organised around a concept called free flow, involving extended periods of time where children are able to choose to be inside or outside. During free flow time children were given the opportunity to be in the school garden, from October through till March children were involved in cutting willow with secateurs, putting it into piles, removing raised beds, creating new flowerbeds and replanting. Gardening took place in small groups of up to 4 children under the supervision of Jane. This was not a compulsory activity, and children were



asked if they would like to work in the garden with some refusing to take part. Once the garden had been finished it was open to children as an extension of the foundation units outdoor spaces, including a mud kitchen, musical instruments, flower beds, a bug hotel, a picnic bench and willow dome. This area became incorporated into free flow, with some children choosing to run around it, use the mud kitchen, catch ladybirds and make homes for them.

### **Messy research**

Often educational research fails to acknowledge the “complexity and open-endedness of phenomena are sacrificed for seeming certainty and closure” (Rautio, 2013a: 10). Thus, in order to attempt to capture more of the intricacies and complications of doing research with children and more-than-humans this study has been conducted through the lens of messiness (see Law, 2004). The research developed over time in messy and spontaneous way, as case partners changed and participants acted in unpredictable ways, research methods were adapted to challenges posed. The research was messy materially, I would often get muddy, wet and smelly with my participants as we undertook activities, like den building, playing in the mud kitchen and encountering fire, as we learnt together rather than learn about individuals as subjects.

The research involved ethnography including observation, participation and interviews/focus groups in each of the 3 research sites during the school year of 2014-2015. Ethnography, in this research, was used as a way to follow connections of objects, bodies, practices, animals, plants, mud, smoke, imaginations and ideas across the research sites (see Cook, 2004). These things that I have listed were not selected prior to the research place, but emerged as I became immersed in the research sites as the ethnography unfolded. They became important things as they were involved in the co-production of space, learning and knowledges. For example, initially mud became a significant thing because of the ways that children dug at it with sticks and their shoes then rolling it in-between their fingers in the fire square. These actions drew me

to mud, and then I followed it in and across sites, which led me to make observations about the influence of mud within, across and between these spaces.

Following the movement of bodies in and across sites was an important part of this research, which was conducted as a 'go-along' (Kusenbach, 2003). The 'go-along' is a technique whereby the researcher moves along with participants during multi-sited ethnography (*ibid.*). This involved following participants during the outdoor learning sessions and then conducting audio-recorded walking interviews with those from Garden, Meadows and Woodlands schools. I followed children throughout each outdoor learning session, as they got ready, moved to the wood, sat as they were given instructions, carried out activities, collected sticks, mud and worms, ran around, played games and returned back to the classroom. Once I had followed participants and felt that they were comfortable in my presence, I would invite them to take part in a walking interview. Before the walking interview began, I would explain to children that I wanted them to give me a tour of the space and tell me about their experiences. I would then ask individuals if they still wanted to take part, but made it clear that they could leave the interview at any time without giving permission. The openness of the research methods allowed children to conduct interviews how they wanted to. A member in the group would hold the Dictaphone; some groups would pass it between them, whereas with others I needed to encourage some children to allow their peers to hold it. At times I was absent all together from the interviews, as children moved more quickly and nimbly than I could. Thus, more traditional researcher-participant relations were often challenged with children steering the interviews by taking charge; choosing where to lead the interview, moving in different ways (being still, running, jumping, walking) and through forming their own questions that they asked each other.

Before the data was analysed all names and personal details were anonymised, and a university research ethics committee approved this research. I did not use predefined themes, theories or codes to explore the data, resulting in information being forced into categories and potentially ignoring complexity (Silverman, 2011). I attempted to analyze the data in a way that retained

some mess in order to capture some of the nuances and the complexities when representing the outdoor learning spaces. I turned to grounded theory, whereby the researcher should look at each text with fresh eyes without any predefined questions which are asked of the text, instead questions emerge through the analysis (Bryman, 2008).

### **The mud kitchen**

Adults structured children's encounters with mud within the forest schools and garden, there were rules, routines and spatial regulation surrounding child-mud relations including how, when and where they encountered each other. Mud across the sites was a indivisible mass of matter containing twigs, grass, stones, water, leaves and rotting vegetation that was all-at-once solid, flowing, watering, oozing and more as children tacitly encountered it by digging, splattering, smearing, flicking and mixing it (Horton and Kraftl, 2017). Mud could be seen and smelt across the outdoor learning space, but also as it oozed out into other spaces- classrooms, corridors, cars and homes, as it travelled with children under their finger nails, on splattered clothing and clumped on shoes. However, adults often tried to limit this oozing across space, as there was often a time and a place to be with mud and across all of the sites it was in the mud kitchen- an outdoor space where children are encouraged to play with mud. The mud kitchen has become a common sight in outdoor play settings, particularly those designed for early years, that is thought to encourage open ended and spontaneous play, whilst children explore their environment in a creative and imaginative way (Wiltshire County Council, 2014).

Figure 1. Woodlands school mud kitchen

Figure 2. Garden school mud kitchen

A mud kitchen was present in both forest schools and the school garden, as you can see from figures 1 and 2. At Meadows school the mud kitchen could be potentially accessed by all

children who attended, but at Woodlands and Garden schools access was limited to early years children. At Woodlands school access was limited, due to older children participating in structured pre-defined activities and at Garden School it was part of a segregated early years unit. At Garden school the mud kitchen was a brightly coloured powder blue and pink toy kitchen had been designed for indoor play and was highly visible. The mud kitchen in the forest schools does not instantly appear to be kitchen-like. This furthers the idea that it is a separate space from the classroom and the home, but there is also a sense of familiarity about it through the choice of pans, baking trays and other kitchen utensils (Woodlands school) and Tupperware containers, paint pallets and plastic food containers (Meadows school).

The kitchen, as with other goods, was re-imagined by both adults and children and was shaped by broader social concerns relating to childhood, nature and education (Gregson and Crewe, 2003). The kitchen was reconceptualised from one of cleanliness to one of dirt, and this can be seen as a reflection of current dominant societal values that children are too clean. In the mud kitchen, dirt is seen as being in place- it is not seen as disgusting, mapping onto broader symbolic hierarchies that divide humans and more-than-humans on the simple logic of what is and not regarded as filth (Stallybrass and White, 1986). In the wrong place mud can be seen as filth, as a potential disease vector, a sign of neglect and poverty. However, mud has been re-imagined by middle-classes as a sign of a free, wholesome and happy child who becomes dirty through play in the process of re-wilding childhood (see The Wild Network, 2018). Through this re-imagining of mud the creation of the mud kitchen can be seen as a product of this imagining, as a space created where mud belongs and children can supposedly become wilder, an idea that connects to broader concerns that children have become disconnected from nature. Therefore, the mud kitchen through its encouragement of muddy intra-actions becomes an important space in realising adult dreams of reconnecting children with nature.

Across all settings materials, in the mud kitchens, were an important part of its architecture making certain activities possible by actively shaping children's thoughts and actions by

encouraging muddy intra-actions. The concept of intra-activity is particularly useful in making sense of the children's embodied performances of gender, as it highlights the material practices that bring subjects and objects into being. Barad (2007: 159) argues that "bodies in the making are never separate from their apparatuses of bodily production". In the mud kitchen children's bodies were entangled with various objects that are found in domestic kitchens. The familiarity of the kitchen artefacts encouraged children to play in certain ways, making dinner, cakes and hot drinks. Generally, the mud kitchen was often a highly gendered space, both girls and boys performing specific gendered roles, as well as being engaged in familial play. Thus, the mud kitchen stimulated intra-active materialisations that encouraged specific gendered performances and from these activities boundaries emerge between male and female bodies. This doing of gender involved drawing upon the binary logics of masculine and feminine expected behaviours that were enacted through material-discursive relations (Barad, 2007), as this fieldwork extract of children [aged 4] playing in the garden shows:

Maheen played in the mud kitchen singing what sounded like bhangra music in the garden, as she flattened mud out into the pan. Ali then came along, she tries to get him to leave, but then he starts fiddling with the oven door pulling it off. Maheen signals for him to go away again, as he struggled to put the door back on, she took it from him and put it back on herself. Stacey and Hamza joined Maheen at the kitchen, and she did not want them to play with the kitchen and signalled for them to go away. An adult intervened and told her that she must share the kitchen with the other children, a few moments later she ran onto the playground. (*Fieldwork diary, 12/05/2015*).

Maheen's gendered performance of making flatbread is an assemblage of materials (the kitchen and its objects), her Iranian identity, family, societal norms, other adults and children. In this

event socio-materialities collide and become entangled (see Waite, 2015), as Maheen's gendered identity becomes embodied through the music that she sings, the movements that she makes as she rolls mud and her reaction to Ali entering the kitchen. Maheen marks out other children, particularly the boys, by their difference, as being incompetent and bringing a differing set of practices into the space that potentially threatened the domestic world that she has reproduced. However, it is an intervention from an adult that draws a close to Maheen's performance and the assemblage of things drawn together in this event falls away as she runs back to the playground. Maheen's performance in the mud kitchen can be seen as her creating a sense of place and belonging through familiar domestic materials, as often she is isolated and alone when outside. This can be seen as a reflection of the emergence of the kitchen as an important space for many minority women who use the kitchen as a space to build community and to "take on the challenges of a new life in a new place" (Longhurst *et. al.*, 2009: 342).

Gender relations and identities did not always fit into hetero-normative positions, whereby boys and girls neatly fell into specific roles, as performances took on unexpected forms (Skeggs, 1997). The gender relations between boys and girls tended to be more fluid with them performing a range of practices with and through kitchen materialities. The movement across gender and between positions is shown in the fieldwork extract below as Kim and Steve aged 6 play in the mud kitchen at Meadows school:

Steve asks me if I would like to make dinner with him. He instructs me what to do, to dig the mud up and place it in a bowl. Steve also digs, we are crouched down and using a trowel to dig with. He then calls over Kim to help with dinner. They fill a painting pallet with mud, smooth it out and cut it into slices, making 'chocolate brownie'. They continue to make dinner and then Kim shouts loudly, "Dinners ready" and she then dishes it up for me placing them on lid and they give me a trowel to eat them with. (*Fieldwork diary, 02/10/2014*).

Kim is invited to play in the mud kitchen by Steve, and the gendered role that she initially performs appears much more passive than Maheen's. Kim does what Steve instructs her to do; as he prepares the mud and when 'dinner' is ready she takes on the role of dishing up, whilst serving me and Steve. In western societies the kitchen has undergone a profound social change from being an overtly female space of women's work, to one that is increasingly a space of sociality where lines between male/female roles have become blurred (Meah, 2014). Steve's engagement with the mud kitchen can be seen as reflecting broader social changes in a post-modern period, whereby fixed gender roles have been challenged and replaced by more flexible relations (Giddens, 1991).

### **Child-mud cuts**

Many children avoided getting muddy and they enacted discourses related to cleanliness. The performances of Emma, Amelia and Doreen aged 8 were shaped by muddy intra-actions in forest school, as they would attempt to remain as clean as for them mud was disgusting and filth. They negotiated the wood carefully and attempted to avoid wet looking patches of mud, which if they encountered them they would minimise contact with them by tiptoeing through in an ordered way that avoided messiness producing a clean-dirt cut. However, at times unwanted contact with wet, cold and slippery mud was impossible as they strayed off the path into an area of ferns that covered muddy puddles. The following interview dialogue captures this event:

Emma: You just go over some dirty mud and water.

Amelia: Very disgusting.

Doreen: My mum is going to be really mad because I stepped in some mud [*she wipes her foot on a fern*].

Emma, Amelia and Doreen responded to mud in an emotive way rather than repeating the dominant message at forest school that mud is good, due to its perceived therapeutic properties.

The language used is important; Emma uses the word dirty to describe mud suggesting that it is out of place, and such a classification is a way of policing boundaries between her body and the more-than-human world (Douglas, 1966; Stallybrass and White, 1986). The children here are making cuts, they are trying to exclude mud from their bodies, and as such they are trying to separate it into an isolated entity that can be managed (Barad, 2007). Although, their efforts are unsuccessful as mud permeates beyond the forest school, which is explored later in this section. The presence of mud on children also had the effect of strengthening dominant adult-child boundaries, as it became a way that adults could act on and govern children's bodies to promote a moral agenda of cleanliness (Foucault, 1991, 2008). For example, Doreen clearly feels that she has done something wrong stepping in the mud, due to the guilt that her mother is going to have to wash her clothes, and therefore mud for her becomes simultaneously a moral and physical problem. She is prompted to try and remove the mud, as she wiped her foot in the nearby undergrowth. Emma, Amelia and Doreen were affected by mud it shaped their thoughts, emotions and actions, and therefore mud was not just mere matter it was an active material (Barad, 2007).

When mud-child bodies became entangled, it could be seen as the breaking down of the cut between people and more-than-humans, as bodies became messy hybrids challenging ideas that children are disconnected from nature (Barad, 2007; Haraway, 1991). As children moved through outdoor learning spaces, mud encountered them becoming entangled with their bodies, as it dried on their skin, lodged under their fingernails and stuck to their clothes and shoes. Yet, messy hybrid bodies they were not always seen or celebrated as showing children's embodied connection to 'nature'. Informal conversations with staff revealed differing cultural perspectives between some parents and outdoor educators. Whilst outdoor educators embraced children becoming muddy as a sign of connecting to nature, some parents worried about their children becoming dirty, especially boys as girls were perceived to remain cleaner by being careful. Thus, constructions of mud as dirt and the work of becoming clean again overrode popular concerns about nature-child disconnection for some parents, as being clean is often



considered to be a mark of social status. Becoming and remaining clean requires continual work and dirty work is often divided down class, ethnicity and gender lines (Campkin and Cox, 2007). These concerns could be potentially heightened if those parents are working class, especially women, as they have become subjects of ridicule and as being associated with dirt, poverty and neglect of their children within the media and society more broadly (Skeggs, 2004). When mud becomes dirt, we make judgements about it, and therefore it takes on a different agency that is normative. Thus, there is the construction of a binary, whereby mud is good when it engages children with and connects to the natural world, but becomes dirt when it allows for judgements of respectability and responsibility to be made, which may be class-based.

From my personal experience of attending forest school I found my clothes and body were often muddy and smelly, especially if a fire was present. In order to prevent dirt and the smell of bonfire permeating throughout my home I would immediately shower, change and place my clothes in the washing machine. For parents this would create a considerable amount of extra work for them, and potentially disrupt evening routines. At Meadows School, where forest school was a voluntary activity, a number of children choose to opt out or were unable to attend forest school, attendance was often in single figures, and was predominantly dominated by middle-class girls. Anna spoke about how some parents had chosen not to send their children to forest school, and they expressed concerns about their child becoming dirty. To participate in forest school children had to bring an additional change of clothes, a warm coat and wellies, children would often be splattered with mud and their parents would collect them while they were still muddy. The consequences of mud play and responsibility for cleaning the child was left to the parents, and to ensure that their child was clean this would require both time and money. Meadows school is located in an area that is generalised by the Office of National Statistics (2013) as working class and multi-ethnic, with relatively high deprivation. It is possible that some parents may not have been able to afford cleaning their children in terms of the financial cost and/or the time it takes. Thus, creating a potential socio-economic barrier that could prevent some children from participating in forest school.

### **Waterproof-child cuts**

In response to concerns about children becoming muddy and to avoid conflictual relations with other adults who found the presence of mud indoors as being out of place, Woodlands school provided wellies and waterproofs for each child (30 pairs for each age range). Practitioners saw waterproofs as enabling all children, regardless of their gender or class, through connecting with messy materialities. Waterproofs were perceived to be a barrier between children's bodies and mud, as it was felt that mud was contained within its place – within the forest school and not upon children's bodies and therefore they facilitated the cut between children and dirt. Waterproofs and wellies were part of an assemblage, including soap, water, drying space, detergents, reproofing chemicals, cleaners, capital, school leaders, practitioners, adult helpers, discourses of care and children's desires that facilitated and constituted mud play. The waterproofs were reused regularly, initially they were hung in classrooms, but this took up space and interfered with teaching and learning practices. To overcome the seeping of forest school into classrooms, a drying space was created around a courtyard with wooden poles installed into the wall so that waterproofs could be hung up, allowing them to dry and then be stored away. Thus, the assemblage of things/ideas related to limiting of mud came into being due to the liveliness of mud intra-acting with adult's boundaries that mud (and forest school) belonged outside creating a conflict that potentially threatened the continuation of forest school as part of the full curriculum.

For children waterproofs were not just a mediator, they through intra-actions combined with child's body forming hybridity, whereby bodies were fused with materials influencing their thoughts and actions (Haraway, 1991). Children wearing waterproofs would run off the paths into thick vegetation covered with ferns, brambles and nettles potentially defying discourses of risk, as well as spatial and identity boundaries. Emma, Amelia and Doreen, during their walking interview, ran into an area of thick ferns; the waterproofs shielded their bodies from brambles and nettles. In the ferns, they found a fallen tree that they responded to by climbing upon it and imagined the presence of foxes that lived in this particular place. They balanced across the tree

imagining that they were travelling with foxes as it formed a bridge between the human and fox worlds. The waterproofs were involved in co-producing this event as without them it is unlikely that Emma, Amelia and Doreen would have risked damaging their own clothes and consequently their identity as careful, clean girls. Thus, waterproofs provided opportunities to explore the woodland through a range of movements away from the path and adult supervision that defied the spatial/identity boundaries.

## **Conclusion**

Before undertaking this piece of messy research in outdoor learning spaces I did not intend to examine identity, but by following socio-materialities across the sites, gender and class became intersections of identity that I could not ignore. By being open to more-than-humans I was able to see those that intra-acted with adults and children, and how they became part of their performance of identities. There were times when specific objects in the mud kitchen were ascribed gendered meanings and stimulated intra-active materialisations that encouraged specific gendered performances. Yet, to see more-than-humans as just merely things that were ascribed with meaning by becoming symbols of identity would only be a partial view. More-than-humans were active in shaping and facilitating performances of identity, as some children through socio-material intra-actions were able to renegotiate gendered boundaries and practice more flexible identities. For example, although waterproofs were part of an assemblage that created a mud/child cut, but they also enabled some children to perform identities that defied socio-cultural norms through drawing them into more risky intra-actions with more-than-humans. Therefore, this analysis provides a more nuanced understanding of gender that recognises the messiness of identity production that involves arrays of more-than-humans, humans, and discourses that can produce hetero-normative identities, but also provide opportunities for identity experimentation.

Muddy intra-actions shaped thoughts, emotions and actions within the outdoor learning spaces and when combined with discourses related to dirt/cleanliness stimulated the performance of gendered and class based identities. When mud became entangled with children's bodies it was often constructed as out of place reinforcing the boundaries between people and the more-than-humans. Cuts were produced when children, educators and caregivers tried to exclude mud from children's bodies, and as such they are trying to separate it into an isolated entity that can be governed. Earlier in the paper, I outline how governmentality in a Foucauldian sense operates through the regulation of bodies as clean/dirty. This is seen in the ways that children's bodies are managed, by the self and adults, through the internalisation of discourses related to care/cleanliness and the use of technologies (e.g. waterproofs, wellies). Encounters with mud were one way that children could display their competence by avoiding becoming too muddy. Ethnographic observations and walking interviews revealed that despite the dominant message at forest school of mud as good children had already internalised discourses related to cleanliness and these were stronger. When mud was present on children's bodies it had the effect of strengthening dominant adult-child boundaries, as it became a way that adults could act on children's bodies to promote a moral agenda of cleanliness/messiness. Being clean created another cut down gender lines, as doing the dirty work was divided with continual cleaning required by educators, school cleaners and care givers, many of whom were women. Thus, when mud became embodied rather than celebrating the more-than-human entanglement concerns about dirt were more powerful and a range of assemblages were deployed to separate mud from children's bodies.

Acknowledgements

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