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Complicating childhood-nature relations: Negotiated, spiritual and destructive encounters

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ABSTRACT

The aim of this paper is to complicate predominantly western, dominant discourses of childhood-nature relations. Drawing on an approach inspired by common-world theorisations, we attend to the experiences of children and their families living, learning, working and playing in the goings-on of Indian urban transformation. Based on in-depth, ethnographic research, we build on literature which highlights the messy world of child-nature relations to extend current theorisations. We pay attention to socio-spatial negotiations, spiritual influences and destructive tendencies to offer a new perspective on how children perceive, experience, affect and are affected by diverse natures.

1. Introduction

In this paper we contribute to the growing body of literature that seeks to disrupt romantic discourses of childhood-nature relations, moving away from a principally educational driven paradigm which advocates for 'close contact' with nature (Louv, 2005) to one which acknowledges and theorises the messy relations between human and non-human Others (Taylor et al., 2013). It is our intention that the paper unpacks 'the encounter' between children and diverse natures in an urban Indian context. We build on exciting work emerging from geographers (Horton and Kraftl, 2017; Hovorka, 2017; Lorimer, 2010; Malone, 2016) and childhood scholars (Blaise et al., 2013; Blaise, 2016; Rautio et al., 2017; Taylor and Pacini-Ketchabaw, 2015) to attend to the messy world of childhood-nature relations. Through in-depth ethnographic research we analyse children and their parents' experiences of living with a diverse range of natures.

There are several key contributions of this paper. First we build on existing work which has been published in the space of childhood-nature encounters by considering *negotiation* as part of our theorising of child-nature relations. Second, extending the work of Taylor and Pacini-Ketchabaw and their notion of *awkward encounters* we bear attention to destructive moments and happenings to further complexify our understanding of child-nature relations. By destructive we mean a point or a moment which contests or jars prior assumptions about childhood and nature (as romantic and idealised). Destruction is a key component of child-nature relations, not something to be viewed as distinct from vibrant and lively encounters, but a core constituent. Finally, we consider our most significant contribution to be the opening up of our conceptualisation of *nature* to include narratives of spirituality. Our data from young people in India encourages us to consider the importance of spirituality in enlivening child-nature relations. The interwoven narrative of gods, animals and ghosts which emerged from in-depth discussions with children and young people offers a new perspective on dominant western theorisations of child-nature relations. We argue that these three contributions of *negotiation*, *spirituality* and *destruction* offer an important counterweight to much of the existing (predominantly western) literature about child-nature relations.

The paper builds on a post-structural, common-world framework (Taylor, 2013a, 2011). We also take theoretical influence from Haraway's (2008) companion species and post-human landscape and Barad's (2007) notion of entanglement. It is through this lens that we attend to the hybridity of children's everyday experiences. We argue that young people's lives shape and are shaped by interactions with diverse natures, acting together in the choreography of life (Buller, 2015). In doing this we are sympathetic to the problems associated with representation when doing multi-species work (Kirksey and Helmreich, 2010), however, it is not our intention to attempt to speak on behalf of these natures (whether it be the cow, the monkey, the tree or the spirit). This paper focuses on the language, movements, actions and feelings of children and young people; it is in this context that we contribute to the literature on childhood-nature relations. Notwithstanding the importance of focusing on children's views and experiences, we found that children's parents, older siblings and adult relations were important actors in facilitating, shaping and enabling childhood-nature

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encounters, thus for the purpose of this paper, their voices and experiences have also been drawn on. We are also aware of not essentialising Indian childhoods as something exotic and an 'interesting variant case study against the benchmarks of western childhoods' (Taylor, 2013b, 366). Our work with children in India encourages us (and hopefully others) to be open to hybrid moments and happenings between children and non-human Others. We show in this paper that childhood-nature relations are negotiated, sometimes sacred and have the potential to be destructive. The terminology 'non-human Others' is used to encompass the diverse natures which young people and their families encountered on an everyday basis, whether it be plants, animals or spirits.

It is important to appreciate the context of the children's lives presented in this paper. The larger research project sought to understand children and young people's everyday experiences of a site of urban transformation in the Indian state of Maharashtra. The research engaged with diverse groups of children including those families who had lived on the land for generations and those who had moved to the case study site from other regions of India. The specifics of the case study are outlined below, however, it is important to note that childhood-nature relations and everyday encounters with non-human Others was not a principal aim of the research. It was through our in-depth interactions with young people living in a space of urban transformation which gave rise to an expanse of data about childhood-nature relations. There are several caveats to this paper which we should acknowledge. First, we note that in researching diverse childhoods (from different caste, religious and socio-economic backgrounds) there is the potential to further unpack intersectional differences in childhood-nature encounters. We also acknowledge that there is much more to say about planning for urban natures and ways in which spaces of urban transformation inhibit and control childhood-nature interactions. Third, beyond the scope of this paper there is a need to better understand the situatedness of children's experiences of diverse natures within the localised environmental education agenda. These three lines of enquiry will be for future papers; here we focus on the potential of opening up our theoretical understanding of childhood-nature relations to encompass negotiation, spirituality and destruction.

The paper is structured as follows: first, we review the theoretical nuances of childhood-nature relations in existing literature, to ground our contributions to this field. Then we move on to review current literature on childhood and nature which has primarily emerged from a minority world context, grounded in the predisposition that childhood and nature are increasingly disconnected. We then provide an overview of the case study context and the methodologies which we adopted in this research. What follows is a detailed analysis of the affectual mutual time-space negotiations, intersections with spirituality and moments of destruction. It is through this analysis that we contribute to a post-human theorisation of child-nature relations (Urbanik, 2012).

2. Theoretical influences

In thinking through childhood-nature relations it is important to lay the theoretical foundations for this work. We start by acknowledging the troubled dualism of nature and culture, where nature and culture are so quickly separated and pitted against one another (Fredriksen, 2016). In this vein, Taylor and Blaise (2014) find Haraway's notion of 'queer worlding' useful. They argue that this works to both 'de-centre the autonomous human subject but also [queer] what counts as nature' (Taylor and Blaise, 2014: 378). This approach encourages us to move beyond the predisposition that nature is something that is waiting to be explored by children, to an assumption that boundaries are blurred and to also question the very nature of natures; what 'counts' as nature? With this in mind, the notion of assemblage has been used to account for the multiplicity of human and non-human encounters which happen across space and time. Drawing on Deleuze and Guttari's assemblage theory, in other words a network of relations, we can clearly see the multiple connections between children's bodies with a whole host of natures, from mud, to stones and ants (to name a few examples). As identified by Smith and Dunkley (2018: 307), from an assemblage viewpoint these actors 'acquire their identity, form and meaning through their relations, but also … [the] assemblage represents more than the agencies of its elements.' This approach gets closer to the hybridity of childhood-nature relations.

Taylor et al. (2013: 54) encourage us to think of *contact zones* between children and non-human Others, they suggest that 'contact zones require active engagement with the other, mutual co-shaping involving someones and somethings, and entanglements across borders and cultures.' Within *contact zones* there is some consensus that agency does not only belong to humans; Barad (2007) has been influential in asserting that non-human Others have the capacity to be vibrant and assert agency (Arvidsen, 2018). Thus within *contact zones*, there are a series of intra-actions (Barad, 2007), where different agents have the capacity to act. Much of this theorisation comes under the banner of posthumanism (Arvidsen, 2018), given that it 'challenge[s] human exceptionalism, posit that human-non-human relationships emerge temporally, and / or demonstrate how what we ontologically understand as human is really a complex relation with other species' (Lloro-Bidart, 2017: 113). It is within this framework of queer worlding (Haraway, 2008), contact zones (Taylor et al., 2013) and intra-actions (Barad, 2007) that we seek to further disrupt the overtly western-centric, dominant knowledge base of childhood-nature relations.

On the one hand then, we use post-humanism to unsettle these dominant assumptions where we 'reposition non-humans as legitimate subjects of social inquiry with the capacity to act, disrupt, and resist in surrounding webs of life' (Margulies and Bersaglio, 2018: 103). On the other hand, we are mindful of the mounting critiques of such an approach, from failing to acknowledge the historic entanglement of humans in a web of relations (Braun, 2004); to the spatial dominance of western discourse in post-humanist thinking (Sundberg, 2014); and most recently the place of agency in new materialism and what is argued to be an unconvincing theory to respond to the challenges associated to global warming and broader human-nature relations (Malm, 2018). It is important to have these critiques in mind, however, we seek to use this approach to push the theorisations of childhood-nature relations further and building on Horton and Kraftl (2017: 927), `acknowledge the politics, harms, violence and exclusions in(di)visibly co-constituted in/through social-material processes.' In this paper, we critically extend the post-humanism lens to not only bear witness to the 'sometimes surreal, noxious, cruel, hurtful [and] exclusionary' (Horton and Kraftl, 2017, 929) relations between childhoods and diverse natures, but open up the framework to consider the role of spirituality in this web of relations.

3. Childhood-nature relations: common assumptions and possibilities for awkwardness

The literature on childhood and nature is dominated by a widespread discourse which emphasises a dwindling relationship. Led by the widely-cited writings of Louv (2005), his chief argument is that American childhoods have become disconnected with nature; where children's lives have become overwhelmed with technologies, at the expense of their interaction with natures. As argued by Arvidsen (2018: 279) this 'draws heavily on key anthropocentric views that support the idea that humans are exceptional and external to nature.' A direct result of this panic over a 'lost childhood' (Karsten, 2005; Louv, 2005), has been a growing movement of organisations which aspire to (re)connect children with nature. For example, the Children and Nature Network claim to have re-connected 3.9 million children with the outdoors (Children and Nature Network, 2016). This motivation of re-connection began as a western construct, but we can now see its influence in the Indian context, with websites such as *India Parenting* referencing Louv and urging parents to take their children to national parks (India

Parenting, 2016, no page). Whilst we do not dismiss the evidence that increasingly children are spending more time indoors (Wake, 2008; Malone, 2016) this paper seeks to disrupt the widely held assumptions about disconnection (see also Kraftl et al., 2018). On the one hand then we are using Louv and his work as a springboard to consider alternative arguments. We build on the work of Dickinson (2013) who critically unpacks the dominant discourses which circulate in the era of the Nature-Deficit Disorder and Environmental Education more broadly. Dickinson (2013) argues that there are merits in Louv's thesis, however the approach over simplifies children's relationship with nature and fails to acknowledge the 'complex cultural roots of human-nature estrangement' (Dickinson, 2013: 4). Indeed, Dickinson (2013) reminds us that Louv's own social and cultural context is rooted in a 'white middle-to-upper-class' childhood (2013: 7), and his education influenced by the likes of Muir and Leopold, which results in a harking back to a childhood-nature relation which is framed by a white, middle class, male narrative 'obscur[ing] race, class and gender politics' (2013: 8). The predisposition with scientific orderings of natures and the desire to name natures are also strong critiques of the Nature Deficit Disorder (Dickinson, 2013). With this in mind, we contribute to a growing number of studies which seek to 'examine the co-constitution of agencies between children and non-humans' (Smith and Dunkley, 2018: 304) and argue for a more nuanced perspective on children and young people's everyday interactions with diverse natures.

In this paper we take the stance that children who live in urban environments are connected in all sorts of ways to diverse natures. Rautio et al. (2017: 1379) for example argue that natures in urban areas are awaiting exploration 'in the cracks and crevices in cement, in the footprints of foxes and city rabbits.' In a similar vein, through in-depth work with children and young people living in new build developments in the UK, Christensen et al. (2017) showed that Sustainable Urban Drainage (SUD) systems were spaces of vitality. In one particular example, they show how the 'liveliness was constituted through the coming together of weeds, muddy paths, sticks, the children, the butterflies, ladybirds, bikes, and more' (2017: 65). It is important to go back to the nature-culture debate here, in acknowledging that in much of the literature about childhood and nature 'the anthropocentric predicament remains … humans are not considered as part of nature' (Rautio et al., 2017: 1379).

With this in mind we can challenge (i) the commonly held assumptions about human dominance over natures (Taylor and Pacini-Ketchabaw, 2015); (ii) the seemingly perfect relations which are portrayed in accounts of young people being 'in nature' (Arvidsen, 2018) and (iii) the ways in which nature is always portrayed as something 'out there' waiting to be discovered (Horton and Kraftl, 2017). As explained above, a common-world approach (Blaise et al., 2013) encourages us to focus on the messy world which children inhabit, rather than a dichotomy of inside/outside, concrete/grass, nature/culture. In this paper we acknowledge that children and diverse natures are sharing the same space, being companions in a new urban development. In this vein we build on Horton and Kraftl (2017: 930) who argue that 'children and young people are always already co-present with organisms, species, ecologies, nonhuman actants and 'natural' materialities, even in urban or ostensibly 'unnatural settings.' Several studies drawing on new materialist approaches have been influential in shaping our thinking about child-nature relations, including: (i) Änggård's (2016) study of young children playing and their sensorimotor intra-actions with the material environment; (ii) Malone's (2016) analysis of child-dog encounters in La Paz, Peru; and (iii) Arvidsen's (2018) new materialist study of children's intra-actions with dens.

There are other examples from the literature which also encourage us to think differently about widely circulating ostensibly romantic accounts of children's interactions with nature. In the examples which follow, the authors draw on data which highlight fraught and messy childhood-nature relations. The paper by Taylor and Pacini-Ketchabaw (2017) draws attention to *awkward engagements* with natures. Here they show that 'child-animal relations can be non-innocently entangled, fraught and messy' (2017, 132) giving examples of where embodied performances (mimicking kangaroos) and the affectual relations of a dead animal can disrupt child-nature dualisms. Second, Rautio et al (2017: 1384) agree that there is a 'tendency to focus on positive and beneficial child-animal relations … [leaving] out a wealth of undesired, conflicting and even harmful relations.' Thus, their research draws on a child's reaction to a *shitgull* to explain how these overtly idealised tendencies are challenged. Third, Horton and Kraftl (2017: 929) seek to overcome these 'axiomatically positive' assumptions. Their research on children's outdoor play opened up a discussion of the social-materialities of *smearing, swarming* and *percolating,* and the intersections with wider social-political-economic geographies. These three papers offer a new perspective on children's relationship with nature and encourage us to consider the messy and fraught relations, experiences and everyday encounters which young people may have with diverse natures. So on the one hand we take this as a point of departure, but there is one further influence which we are drawn to, the place of *embodiment* in child-nature relations. Willersley (2004), in the context of Siberian Yukaghirs, shows how human life can take on Other forms 'in the shape of rivers, trees, and spirits' (2004, 629). Here, in this context, all natures (human or animal) have a soul. In our research with children and their families in India, being open and attune to human bodies taking on Other forms is vital in our understanding of child-nature relations. Considering these literatures, we are attune to the power of non-human matter and the spiritual influence of non-human Others. Our analysis seeks to disrupt commonly held (often western) assumptions about childhood and nature and suggests alternative nuances to the current theorisations in childhood studies and the wider nature-culture debate. Understanding how bodies, be it human or otherwise intermingle, negotiate, move, glance, fight, love, hold and indeed share in city life is important.

4. The field site: a space of urban transformation

The data presented in this paper emerged from in-depth research in a space of urban transformation in India. The case study, Lavasa, is a new, private-led city initiative located in Maharastra, several hours drive from Pune. At the time of the fieldwork in 2015, the first of four towns had been built (including housing, numerous community facilities, spaces of education and employment). This new build development, at the time of the fieldwork, was symptomatic of India's current urban transformation story and thus was selected as the case study site (McKinsey Global Institute, 2010). As a response to the demand by a growing Indian middle class for clean, green, sanitized urban spaces that contrast to the maelstrom of urban life which characterises Indian cities, the private sector has an increasingly pivotal role to play in shaping urban life. Built on a green field site in the Western Ghat mountain range, Lavasa is nestled among seven hills and sits alongside a vast network of lakes well-known for its flora and fauna. So to some extent, this is an ostensibly natural environment, only lightly touched by anthropogenic processes; however, with the building of Lavasa, natures have been planned, controlled and tamed for human-urban occupancy. Designed on the American inspired principles of New Urbanism promoting diversity, walkability and accessibility (New Urbanism, 2016), this was a new form of urban planning for the Indian context (see Roy and Ong, 2011). The Lavasa planning framework advocates for *transect planning,* whereby a higher density of housing and services is designed into the urban core, dissipating towards the edge, supporting the integration of 'nature'. Indeed, Lavasa prides itself as having 'urban advantages in a natural setting' whereby residents can 'live, work, learn and play in harmony with nature' (Lavasa, 2013). We find that this setting offers fertile ground for exploring childhood-nature relations.

An aim of our research was to unpack the diversity of childhood experiences living in a space of urban change. Lavasa (at the time of the

research) was home to children and their families who had previously lived on the land for generations, migrant families who were building the infrastructure, students who had moved for the higher education facilities, young people working in the tourism industry (a key facet of Lavasa's marketing strategy), and families who had bought into the dream of owning a lakeside property or villa. It was through our ethnographic research with young people from diverse social and economic backgrounds that data about childhood-nature relations emerged. In particular, our analysis is prompted by: (i) the innate ways in which those who were previously living on the land spoke about local nature-culture ontologies and epistemologies and (ii) the evident multi-species negotiations which occur in spaces of urban transformation.

5. Methodological ventures into childhood-nature relations

The aim of this in-depth, ethnographic study was children and families' everyday experiences of urban transformation in India. We were interested in young people's mobilities, their interactions with the urban transformation process and their relations with diverse natures. The research team, which included the authors of this paper, translators and local fieldwork assistants, spent eleven months (in 2015) living in the case study site, getting to know the participants and the everyday realities of urban change. In total, over three hundred and fifty children, young people and adults participated in the project. The core research participants included forty families, comprising young people (aged 9–25) and their adult relations (either parent, grandparent, older sibling or extended family member). The number of participants from each family depended on personal circumstances and willingness to take part in the project. As previously mentioned, these families represented diverse family circumstances and living arrangements. Many participants were recruited via getting to know and being seen as the researchers in the community, however, the local schools were pivotal in gaining access to participants and their families. A mixed methodological approach was adopted (see Hadfield-Hill and Zara, 2017 for more details), including the following: (i) an ethnography of life in a site of urban transformation; on a daily basis, in depth notes documented interactions and the goings-on of life in this space of urban change; (ii) a suite of interviews based on '*getting to know you', 'everyday mobilities'* and '*interactions with natures'* (160 interviews and guided walks were conducted); (iii) younger participants were asked to *draw their local area*, as a prompt for the first interview (78 children's drawings collected); (iv) a series of participatory '*My City*' model making workshops were run in four local schools, as both a data collection and dissemination exercise (130 participants); and (v) an innovative mobile application *'Map my Community'* was co-developed with the participants, with the aim of collecting data on the in-between spaces of life in a new community. All forty families participated in the mobile app activity, collecting data on various aspects of their everyday life (see Hadfield-Hill and Zara, 2018 for explicit details of this method). The spaces of the research are also important to mention; many of the interviews took place in participants' homes or in favourite outdoor spaces which enabled them to show us the rivers, the ants, the dogs, the trees in which they spoke so vividly about. We are aware that this project was not designed to be a multi-species ethnography (Rautio, 2017) or an approach explicitly grounded in a post-qualitative, new materialism methodology (Blaise, 2016); however, it was walking barefoot with our participants through the forest and getting wet in the monsoon, together, that we have come to write about childhood-nature relations from this perspective.

With regard to data analysis, all interviews were transcribed (from the recordings) and for those interviews not conducted in English, translated. All data has subsequently been thematically coded to identify themes and convergences in the data. For the purposes of this paper, data from the in-depth interviews, guided walks and our ethnographic notes have been analysed to tease out children and their families' experiences and relations with diverse natures. We find that our analysis sheds light on the spatial, cultural, historical and ecological 'realities' of children and young people living alongside diverse natures; it has been through the folding of methodologies that we have been able to complicate the widespread discourse about childhood-nature relations.

It is important to acknowledge a number of methodological constraints to the research. First, that the two lead researchers for this project are white, European and female. Despite having both previously done extensive fieldwork in India, we were acutely conscious of our positionality. The ethnographic approach, living in the new development for an 11 month period, was one way to overcome some of the potential barriers which may have arisen. Importantly however, local researchers were employed, fluent in the local dialect (for those participants who could not speak English) to work with participants. The approach to a large extent was participatory, with young people designing consent forms, co-designing the mobile app tool, facilitating workshops and being central to the knowledge which was produced in this project. Second, it is important to acknowledge the multiplicity of privileges which we had as researchers, both in terms of our positionality as white, western researchers and our adult assumptions about childhood; whilst we cannot de-imperialise the study and consequential privileging, we hope that the co-design and participatory approach enables young people's voices and experiences to be the dominant narrative in the analysis. Principally, this research has foreground young people's voices, movements, attitudes and experiences in their interaction with diverse natures, however, it is important to also acknowledge the thorny problematics of writing about human-animal relations, in particular animal agency (Buller, 2015). Indeed, in much of the analysis below we use quotes from children and young people to evidence ostensibly more-than-representational encounters, to pay attention to more-than-social registers. With this in mind, we attend to the messy worlds (Taylor and Pacini-Ketchabaw, 2017) of child-animal relations and expose childhood-nature encounters as an ongoing spatial and temporal negotiation between children's bodies and non-human Others.

6. Mutual time-space negotiations

We begin our analysis by acknowledging the co-habiting of diverse natures which young people and their families' frequently articulated; living alongside a diverse range of species, from rats, to lizards, monkeys and tigers. The entwining of bodies, co-movement and co-routine were common between young people and non-human Others; these were most strikingly articulated via young people's relations, comings and goings with wild dogs, cows and monkeys. Here we relate to the work of Malone (2016) and child-dog interactions in Bolivia, highlighting the intra-action of child and dog and the work of Benwell (2009) on everyday mobilities in South Africa, shaped by perceived dangers of security dogs, baboons, snakes and spiders. In our analysis however, we seek to decentre the child in these relations and highlight a series of socio-spatial negotiations between human and non-human Other. The wild dogs in Lavasa were agents which had the capacity to affect and to be affected, the following note from a fieldwork diary (Author 1) and quote from a young participant are indicative of the negotiations between humans and dogs, and between the dogs themselves:

> *'This afternoon I went to an interview at one of our participant's houses. I had already been warned about the dogs. They were not wrong, it was terrifying – seven or eight dogs in the street marking their territory, they wanted me to know that this was their space. I was relieved when the mother came to the door and ushered me in'* (Author 1).

> 'they are wild dogs, they are very territorial … if these dogs from the Waterfront, there are four of them, if they come up to our street then it's like hell will be loose' (YR76, Female, Age 15).

Lavasa was their home too, each had their own patch, their own space, where they would sleep, eat, shelter from the monsoon and at certain times of the day they would scavenge for food and seek human interaction. In these examples, encounters were witnessed between non-human Others, dogs fighting over territories, over patches of land. However, there were also examples of children and their parents being part of, on the slide lines of intra-species fighting. In the quote below a parent speaks vividly of an encounter between a python and a deer, which the participant witnessed from a distance. Here the human body had an affectual relationship, with the human's presence in this space, the python moved on:

> 'The python had caught a deer … they were fighting so much … the python had coiled itself around him twice or thrice and it was pulling it … it saw us. They were applying such force against each other, the deer was using its energy to free itself and the python was using its energy to kill it. It coiled around it and broke its bones with a bam. The python saw that we were standing just some distance away and it left the deer on the spot and slithered away' (PA41, Male, Age 36).

In the retelling of similar encounters, young participants often emphasised the importance of dogs as significant actors in co-movement; dogs protecting *on the move*, accompanying them on journeys, through the forest, to the shop or school. The dogs were wild, however, many participants had innate relationships with these animals, often naming and feeding them. There was an essence of protection and care on the part of the dog which emerged from the data, indeed, and vice versa, where young people would speak about *my dogs,* blurring the boundary between wild and domesticated (Kirksey and Helmreich, 2010). Wild dogs were part of this landscape, a landscape where dogs and humans co-belonged, interacted and negotiated space. When children came to know the dogs on an everyday basis, they knew which ones were *theirs* and which ones were not. This is similar to Govindrajan's (2015) participant who reflected on being aware of the habits and personas of individual monkeys 'we know that these monkeys are outsiders in the same way we know when people are outsiders … their walk, their habits, the ways they look, everything marks them as outsiders' (2015, 247). Another example was presented by a parent in our research; she spoke of her interaction with a family of monkeys. Each day whilst her children waited for their lift to school the monkeys would be part of this time-space moment. In the quote, the participant imagines the monkey was saying 'come and see my baby'; a human trait to show our young to others:

> 'Every morning when they went to school there would be this monkey family you know that would come and sit there … they come out at exactly the same time every day … one morning they made a lot of noise, then there was this whole lot of little baby monkeys … [they were like] 'come see my baby' type of thing' (PA47, Female, Age 48)

Up to this point we have shown a relatively harmonious analysis of the human, non-human Other encounter; a co-existing, supportive relation. However, we now draw attention to a series of spatial and temporal negotiations. In the quote below, a young participant describes what she calls an *insect party,* a time when the insects come out of hidden spaces and make themselves known. On the one hand, she speaks of this reoccurrence fondly, a time when she *lives with* insects in her home. However, she explains that this is a negotiated time, where the millions of insect bodies inhabit their family balcony, restricting human mobility in times immediately superseding the rains:

> 'we have like this whole insect party around our house when it rains and stuff … yeah literally there was this one on the balcony was full of insects like you couldn't walk anywhere' (YR76, Female, Age 15).

Socio-spatial negotiations such as these were frequent within the data and in our experience of living in the field. Lavasa was designed to control and restrict the presence of non-human Others; tigers, cows, snakes and dogs were not welcome in the newly built environment. Indeed, perhaps part and parcel of the biopolitical separation of one life over another. However, despite the built biopolitical hyper-separation, on an everyday basis there was an ongoing negotiation between non-human Others and the Lavasa management; cows and snakes were frequent users of this space. Security guards spoke about the calls they would get from residents to move on cows or remove snakes, catching and returning them to the forest. On a daily basis we would see cows sneaking down the steps, onto the sanitised space of the promenade; we would wait, to see how long it would take for the whistle to be blown, the stick to come out and the cow in question be moved on. There were many examples of participants, literally, *living with natures*, on their streets but also in their homes; constant reminders that this newly built environment, was constructed on the homes of Others. In the quote below the participant speaks of literally living with snakes and chameleons, they have their place in the house, their own balconies. In this instance, 'she' has taken on a significant Other in the house:

> 'I had a snake lizard lying next to my face (laughs) … she looks exactly like a snake but she is a lizard … as long as you are not bothering them, they are not bothering us … it is nice actually … that is how it should be … they live on different balconies … but the big ones are bit on the scary side. Yeah so … that's nice and there are lot of time we have had snakes in my house and the … the forest comes alive in the monsoon' (PA47, Female, Age 48).

With natures, 'creeping in', co-existing and making their mark, participants had deep sympathy for these lively encounters, which is in stark contrast to the controlled and managed stance taken by the developers. In our research, negotiations were an important aspect of the multi-species encounter; the agency of non-human Others, whether it be dogs, insects or lizards. They had the power to be in place, to be vibrant, to influence and be influenced. These aspects of the multi-species encounter complicate the widespread discourse of Nature Deficit Disorder where Louv and others prescribe that children should go out and hunt, fish, camp and hike (Dickinson, 2013) - what of the natures that 'creep in' to diverse spaces of children's everyday lives? Through an analysis of movement and affect we have got closer to the intimate moments of these encounters; spacings which are shaped by complex socio-spatial negotiations.

7. Being open to diverse, (spiritual) natures

In this section we seek to further disrupt some of the commonly held assumptions about childhood-nature relations. Arvidsen (2018) encourages us to push our thinking, away from the idealised discourses, or as nature being 'out there' waiting to be discovered. To this we add a further complexity, the place of spirituality in shaping young people's experiences and encounters with nature – a move away from the predominantly scientific focus which has dominated current discourse (Dickinson, 2013). There are parallels here with Taylor's (2013b) work on child-animal relations in Australia, where Dreaming stories are passed down through generations and are influential in shaping child-animal encounters.

We begin with an emotive example which surfaced multiple times throughout the fieldwork, but first a reminder of the context. For many participants, Lavasa was not a new city emerging from scratch, it was a landscape of memories, memories which were explicitly tied to and associated with non-human Others. At the outset, children were asked to draw a picture of where they lived[1] to act as a prompt for the first interview. Trees, flowers, birds, snakes, cows and chickens were some of the non-human Others which appeared in their drawings. In one of the interviews with a young participant she emphasised the importance

[1] With the preface of: 'showing a child in another country where you live'.

of the tree in her drawing; a mango tree planted in memory of her great-grandmother. For the family, the tree personifies a human body; here she explains her father's relationship with the tree, his grandmother:

> 'It's a mango tree. When I talk about that tree I feel like crying … my grandmother was having some problems, so she died after she gave the birth to my father … and this mango tree is for her record … whenever my father felt like meeting my grandmother, his mother, he hugs that tree' (CH06, Female, Age 11).

The personification of trees was common; on guided walks and visits to family homes, participants would often point and say 'there is my grandfather / aunt / uncle' – the tree becomes one and one becomes the tree. This personification was indicative of the entwinement of non-human Others, death and spirituality, a narrative of more-than-material, affective encounters. These non-human Others had a profound capacity to affect experiences and relations with space. Narratives of ghosts were predominantly framed as something which could harm or destroy. In the first quote below, a young participant aged 11 describes a *ghosts moorland* where humans, jungle, blackness and sounds combined at a particular moment in a particular space. In the second, the participant speaks of the forest, death and ghosts and his fear:

> 'Near our house, you go as far as the boating point. There is a big ghost's moorland … a ghost's place … the ghost had driven our father crazy … that time when it possessed my two cousin sisters and my father … the whole jungle had become black. The whole jungle. It was black and it was whistling' (CH59, Male, Age 11).

> '… there are some people who have died there [in the forest] so that's why I am scared they might kill us … the ghosts might kill us' (YR70, Female, Age 9).

The majority of our participants were Hindu, their spirituality was a vital component of their childhood-nature relations; the worshiping of particular natures, as gods, were part of everyday life. Within Hinduism and the multiplicity of its traditions and practices, there are strong connections to natures. Dwivedi (2006, 162), in citing one of the key Hindu manuscripts (*Srimad Bhagavata Mahapurana* 11.2.41) emphasises the innate relation which Hinduism evokes, where, 'ether, air, fire, water, earth, planets, all creatures, directions, trees and plants, rivers, and seas, they are all organs of god's body.' Indeed, he goes on to say that 'for Hindus, both god and prakriti (nature) are one and the same' (2006: 162).

In sacred texts, particularly Vedic literature, tirthas (holy places) are identified based on specific natural characteristics that bestow a spiritual quality to such places. Holy places are often located in forests, groves, hill-tops, mountains and, especially, in proximity of water sources such as rivers, lakes and ponds (Eck, 1981). These holy connections were interwoven in children's narratives and our ethnographic fieldwork. From walking bare foot through the jungle to the sacred place, or lowering offerings into water bodies, it was evident that everyday life was shaped by these embodied more-than-human, devotional rituals. Hindu mythology is also deeply intertwined with natures. First, the symbolic personification of gods with animals is a common articulation, whether it be the 'monkey god' Hanuman, 'elephant-headed' Lord Ganesh or god Vishnu's incarnation into Varaha boar. Second, there is the divinisation or demonisation of natural elements, namely, Ganga, the Ganges river goddess; the sacred Tulsi plant; Yakshas, nature spirits and Rakshasas, the demons of the forests. Third, there is the association of gods with animals, whether it be god Shiva with the bull and Cobra snakes, goddess Ganga with the crocodile or god Vishnu with the mythical bird, Garuda. Fourth, there are the entwined relationships between gods and the natural environment, for example god Krishna and the pastoral landscape and god Shiva and the Himalayas. These examples of religious and mythological allegories are inscribed in Vedic texts, particularly the Puranas, one of the key authoritative sources fuelling Hindu storytelling, along with the epics of the Ramayana and the Mahabharata.

Children's narratives were entwined with a rich tapestry of cultural heritage (Eck, 2012). From educational stories from the Puranas and the Ramayana, to family tales and local nuances of devotion and spirituality, these narratives enlivened children and families multi-species interactions. Young participants would retell stories of gods, animals and nature, as if as one, inextricably linked. The deeds of 'super-strong' Hanuman, tales of snakes, haunted forests and moorlands were often recounted. The following quote was extracted from a narrative about tigers. Here the god, the tiger, the flower, the food are all important constituents of the co-mingling of non-human Others; this quote highlights the critical place of spirituality in children's relationship and construction of nature:

> 'Tiger, one tiger is there but it is in white colour. It is of god. It doesn't eat. When *Urus* is there, [the god asks to eat], the god's name is *Vagzai* … the flower is kept here, on the god's head, when a flower falls down, the tiger understands that [she] has to eat and that time only she eats until the next *Urus* comes. In a year, it comes' (CH06, Female, Age 11).

Young participants would also speak fondly of the Tulsi plant (Shankar et al., 2009). Tulsi emerged in children's drawings, the plants themselves were positioned in auspicious places in homes and classrooms and frequently were the topic of conversation in the research. One of our older participants, a college student, explains the spiritual significance of Tulsi. The personification of nature can be seen here, with plants being depicted as partners, brides and grooms, where a celebration, a marriage occurs between them:

> 'We treat *tulsi* as a holy plant. [A] lot of people have their homes … on the centre of the *veranda* you plant a *tulsi*, a special *tulsi*, you nurture it, you plant it, you pray and then maybe, we even have *tulsi* marriages. We have one *tulsi* plant which is the groom … [one] which is the bride … and then they get married and then both the plants go in one home' (EC24, Male, Age 18).

The sharing of spiritual moments was a common occurrence during the fieldwork. On one such occasion, author two was led by young participants into the sacred forest where their ancestors abode. Carefully guided by the children, they entered the forest barefoot, a practice associated with visiting a temple, a sacred space. The ancestors were fed rice balls and honoured with incense and saffron powder; the saffron placed on the forehead of stones, embodying the demi-god ancestors. On another occasion, during an interview a young participant described the practice of feeding milk to the snakes, during Nag Panchami (a festival which worships snakes), explaining that *snakes come out to drink the milk*, emerging from pipes and homes. Encounters with Hindu spirituality, mediated by young participants, co-constituted elements of the material, the spiritual, the natural and embodied interactions. These were assemblages of the material (i.e. the forest floor, the stones, the rice); the more-than-human (i.e. the ancestors, the spirits); and the embodied (i.e. bare feet on the forest floor). From a philosophical perspective, non-dualistic principles of Advaita Vedanta conceptualise a unity between the material and the transcendental, where the human and the non-human are perceived as a continuum, rather than as a binary. This conceptualisation derives an ecology which values nature and the divine as undivided, as part of a whole where everything is sacred. From this perspective, natures are constituted of the same spiritual substance as the cosmos. Thus, many Hindus see the divine in all of nature, if you like, view nature as 'more-than-nature.' This has prompted new forms of spiritual ecology, conceptualising novel interpretations of nature, the environment and ecological awareness (Prime, 2002 on Vandana Shiva; Miles and Shiva, 2014).

We are keenly aware not to essentialise Hindus' approach to nature as intrinsically and unproblematically 'spiritual.' We are also aware of the problematic of folding in accounts of spiritual systems into our materialist conceptual frame, a point which goes beyond not

romanticising this data and cultural context. Co-construction of the data and the ethnographic approach goes some way to addressing this but we are keenly aware of the problematics of weaving different forms of nature knowledges together. However, we find that it was the everydayness of the nature/sacred relations which can de-romanticise idyllic ideas of nature and spirituality in Hindu cultures and provide a point of articulation for those working in other contexts on childhood-nature relations. The sacred, the human, the material, all coexisted in the routines of children and families. Far from being abstract from the spatio-temporalities of everyday lives, sacred natures constituted them. For many young participants, the cow was at once both 'holy' and the animal which is sent for grazing before school and beaten when it wonders away, just as the sacred forest was simultaneously a place to pluck fruits, do homework and play with friends. Nature is sacred as much as it is mundane, ordinary as much as functional, it is at the same time spiritual, scary, playful, useful, profitable (i.e. plucking fruits to sell), hostile, enchanting and dangerous. The forest was constituted from stones, water, clouds, fruits, paths scripted with memories, spirits, atmospheres, devotion, play and seasonal rhythms. It is in this contiguity of nature, human, non-human and the everyday that children make sense of their lifeworld.

8. The destructive encounter

In this final section we attend to the possibility of *destruction;* moments and happenings which were witnessed, narrated and practiced by young people. Taylor and Pacini-Ketchabaw (2017) attend to *awkward* encounters (i.e. animal deaths) to suggest a new multi-species ethics to challenge pervading knowledge on child-animal relations. Extending this, we argue that a consideration of destruction is needed to further our understanding of the messy world of *roaming pathways* (Smith and Dunkley, 2018). Taylor and Pacini-Ketchabaw (2015) in their discussion of children caring for earthworms, argue that 'questions of life and death become real' (2015: 519) when earthworms are broken in two. In this section we push this discussion further and consider the destructive nature of natures and the child's destructive potential. Natures can be wild; particularly during the monsoon there are limits in terms of what young people can tolerate. Whilst there was a therapeutic affectual relationship which many had with the rain, participants had to adapt their routines and interactions, negotiating their relationship with natures, whether it be the rain itself, the muddy materialities which resulted or the animals which emerged. Mundane tasks such as walking to school, working in the fields, collecting firewood were rendered near enough impossible. Natures were alive with forces of their own, the mud, the rain, the wind, the mould all had a destructive impact on young lives. These 'materials [were] live, active, agentic and powerful' (Tolia-Kelly, 2011, 154). Landslides would cause disconnection, children would be unable to attend school, rain would seep in through cracks in tin roofs, mould would grow exponentially up walls; natures would take over. Natures have the agency and power to be destructive, causing buildings to crack, other natures to react (i.e. mud slides) and the power to shape human experience (Bennett, 2010). For young people, their families, and indeed us as researchers, living through the monsoon disrupted routines, time-space encounters and everyday life.

Second, we cannot speak of destructive encounters without acknowledging the case study as a site of urban transformation, where nature was planned as something which should be viewed from a distance, experienced in a controlled setting. Significant lengths were taken to tame 'nature' from disturbing the human. A series of watering holes for example were artificially placed on the mountain ridge to prevent animals from entering the valley in search of water from the lake[2], controlling natures to minimise human-nature interactions. This speaks to the work of Baviskar (2011) on 'bourgeois environmentalism' and Gandy (2016, 438) who argued that in pursuit of beautiful, sanitised urban landscapes the middle-classes are advocating for the 'forcible eviction of human and non-human nature alike.' In a landscape of urban transformation, young participants were acutely aware that they were living in a co-constructed landscape, home to humans and non-human Others. Many expressed concern for the apparent loss of Others; changing landscapes, where in poured the concrete and out poured the Others. Many families had lived on the land for generations, thus children were acutely sensitive to landscape changes. In the quote below, one young participant speaks of the tigers, who prior to the development used to come to the lake for water, now they are surrounded by a new development, a human-induced landscape of concrete and vehicles:

> '… earlier the animals used to roam around anywhere … since these buildings are constructed, animals are confused that what have these humans built here … when Lavasa came here for the first time, the tigers used to sit here on the roads, even the tigers couldn't understand that they started cutting down trees … the tigers used to sit right in front of the cars' (YR49, Male, Age 18).

The destruction happened to both child and tiger, a shared experience caused by Other humans. He talks of the tiger as if he knows it, he knows the confusion the tiger experienced with the cutting down of the trees and how the tiger perceived the new materialities of the urban. Similarly, a parent spoke of the impact of construction, and thus destruction on non-human Others, in this case the mountain:

> '… for such construction they have hollowed out a mountain. Just like we lose all our strength during illness, the same is applicable to a mountain. The mountain has become very weak now … due to such construction' (PA48, Male, Age 53).

In these examples we have shown children's and their families' observations and shifting relationships with natures as a result of destruction and evidenced how natures are threatened in line with the neoliberal city building vision, one which seeks to separate nature and culture. We now move on to show personal destructive encounters on behalf of the child-human; an intimate destruction between child and non-human Other. The two interview extracts below are particularly pertinent, describing destructive encounters with rabbits:

INT: How can you play with the rabbit? It's much faster than you, isn't it?
YP: We tie a noose … hit a stick like this or … put this big a trap in between in their way … and when it comes… [with] wire.
INT: Do you feel sorry sometimes for the rabbit? What do you do, when you capture it?
YP: We play, we tie it… and play (laughs) … I'll tell you, tie it around the stomach in the middle (laugh)
INT: … and then do you set them free after…?
YP: 'Nods'
INT: Do you think that rabbits are happy to play with you? (Laughs)
YP: Who knows? … they do get scared.
INT: And where do you play all these games?
YP: We go up there ahead and play … we play in the forest
(YR65, Male, Age 10)

YP We had a funny incidence … we saw a rabbit … we jumped from the edge … we killed a rabbit … we took it home … we made a curry
INT How did you kill the rabbit?
YP With stones
(YR70, Female, Age 9)

We find these conversations noteworthy on two counts; first, they highlight that children's encounters with natures are not as 'positive' as much of the literature emphasises. We can think of examples from our own childhoods where branches were broken, flies wings dismembered, worms cut in half and ants set on fire. In these examples, children have set to harm non-human Others, with nooses, sticks and stones. We are interested in the language used by the researcher in these examples. The researcher prompted the young person to think about how the rabbit might have felt when playing with the child. This reminds us of a provocation made by Haraway (2008) when reflecting on Derrida's

[2] Information gleaned from ethnographic conversations.

relationship with his cat. Haraway (2008, 20) comments that 'Derrida failed a simple obligation of companion species, he did not become curious about what the cat might be doing, feeling, thinking.' We argue that an awareness of these destructive encounters offers a further way to disrupt commonly held (predominantly western) constructs of the child-nature encounter. Indeed, in some way we have added to the cultural complexity which Dickinson (2013) called for in her critique of Louv, in acknowledging that 'cultural conventions that underpin hunting practices significantly differ, such as how animals and nature are conceptualised or treated, or whether hunting is a form of power over nature versus a form of communion' (2013: 8). The examples we have presented here are more than awkward (Taylor and Pacini-Ketchabaw, 2017), they are moments, times and spaces which are destructive both to humans and non-human Others, a further nuance in our understanding of child-nature relations.

9. Conclusion

This paper has opened up thinking about hybrid, more-than-social (Kraftl, 2013) relations, developing literature on the inter-woven configurations of humans and non-human Others (Bennett, 2010) through a consideration of socio-spatial negotiations, spiritual influences and destructive tendencies. This data is powerful and has much to offer theorisations of children's experiences of, attitudes to, and relationships with nature (Shillington and Murnaghan, 2016; Rautio et al., 2017). It is here that non-western, childhood-nature relations are brought to the fore; the entwining of the material and the spiritual offers grounds to complicate current theorisations.

We have shown the complexity of the multi-species encounter as something which is negotiated between human and non-human Others. Tensions and thus negotiations are an important aspect of living together. We have shown that non-human Others have the power to be in place, to be agentic, to influence and to be influenced (Bennett, 2010) whether it be a mango tree, the tigers or the 'ghosts moorland'. Indeed, it is this point about the ghosts moorland which jolts our existing theorisation of childhood. In our analysis, the child, their memories, emotions and gods are all entwined in the co-construction of natures. We found that trees personified human bodies and children's affective encounters with spirits and ghosts had a profound capacity to shape their experience, understanding and relations with place. We argue that this extends existing conceptualisations of childhood-nature relations by prompting us to consider the place of negotiation, spirituality and destruction. Children's narratives were entwined with a rich tapestry of cultural heritage and ancestral memory. However, everyday negotiations and destructive inter-active encounters help to de-romanticise idyllic ideas of nature and spirituality in Hindu cultures. It is the times and spaces where the human and the non-human Other come together and affect each other's presence that were of interest. It is with this in mind that we would extend Barad's (2007) notion of entanglement (i.e. things, organisms and matter) to encompass the spiritual.

The research context, a space of urban transformation adds a further dimension. In Lavasa, developers controlled how humans accessed and experienced nature, thus instilling a separation between nature and culture. This control and essentially manufacture of an idealised set of natures ties in succinctly with the work of Baviskar (2011) on bourgeois environmentalism; the sanitisation of urban space, devoid of unkempt natures. At times, young participants repeated the western conception of nature, they themselves embodied the dualism This was most evident in the discussions of multi-species disruptions, where children saw the culture (the new construction) as disrupting natures. Even though children positioned themselves within dominant narratives of nature/culture they also challenged the dualism, as we have shown through their everyday goings-on and relationships with diverse natures be it dogs, ants or spirits. Neoliberal urban transformation is complicating the childhood-nature encounter. A further avenue of research would be to explore how new urban landscapes not only control and restrict children's access to diverse natures, but to understand how the neoliberal nature/culture dualism has influenced spaces of education and learning. There is much work to be done to understand the impact of urban change, in spaces imbued with local natureculture ontologies and epistemologies.

Philo and Wilbert (2004, 2) argued that 'humans are always, and have always been, enmeshed in social relations with animals', however, our research emphasises the importance of acknowledging the place of the spiritual in nexus of child-nature relations. We need to be open to childhoods who speak of the personification of trees, of ghost-moorlands and of complex affectual negotiations with non-human Others. We offered insight into entangled negotiations over space and the potential for these relations to be destructive. Haraway (2008: 301) in describing this worlding, comments that 'human and non-human animals are companion species, messmates at the table, eating together, whether we know how to eat well or not.' This paper has presented data which disrupts commonly held assumptions about childhood-nature relations, suggesting alternative nuances to current theorisations of childhood studies and wider nature-culture debates.

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