PLACE AS PARTNER: MATERIAL AND AFFECTIVE INTRA-PLAY BETWEEN YOUNG PEOPLE AND TREES

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Abstract

A collaboration between the third sector and a university in Southwest England, the Good from Woods project investigated wellbeing outcomes of time spent in woodland through action research by a range of woodland practitioners. The research reported in this article explores relations between children aged 3–15 years and trees in an adventure playground set in woodland regrowth on an old municipal tip. The innovative arts-based methodology highlights playful, imaginative and affective place-based play. We examine the flows of activity amongst human and nonhuman in this environment and consider how this place and its materiality supported intra-play between trees and children, nonhuman and human inhabitants. Our analysis interweaves post-paradigmatic new materialism with ideas of cultureplaces leading us towards an understanding of place as children's (unequal) partner in intra-play.

Introduction

The Good from Woods research project (funded via a Big Lottery research grant) aimed through third sector and university collaboration to develop practitioner action research and explore wellbeing outcomes of woodland work with different client groups. The project's four-year timescale and support of experimentation and iterative learning allowed practitioner-researchers to develop, test and reshape data collection techniques that aligned with their backgrounds and the cultural and material context of their woodland and organisational environment.

This GfW case study involved an artist practitioner-researcher (PR), volunteering as a play worker, observing transactions between trees and children at Fort Apache (FA) Adventure Playground (in Torbay, Devon, southwest UK), and recording both environmental and human impacts. Her approach was participatory ethnography, supporting children's play, whilst observing, using drawings and fieldnotes as a recording device, and encompassing child-led walking interviews, map-making and installations to inspire play. Her methods aimed at capturing the ongoing and layered exchanges between people and place.

Over the last decade there has been an increasing focus across a range of disciplines on the material world's role within these exchanges, highlighting the complex interplay between social, cultural and

material aspects of place and experience (Horton and Kraftl 2006; Thompson 2016). Such analyses can 'decentre' human agency through accenting the relational, shifting and mutual contribution of the material and social to activity (Taylor and Giugni 2012). To acknowledge the significance of relationality, finding ways to accommodate heterogeneity, entanglement and interdependencies across people-place associations becomes essential (Bakker and Bridge 2006; Whatmore 2002). By attending to relational events and the entanglement of the material world within them, *intra-activity* (Barad 2003, 4) or *intra-play* between human and nonhuman is foregrounded. In this case study, we examine childhood-nature transactions as transient yet consequential fusions of cultural activity and place, so called cultureplaces (Quay 2017). Good from Woods, as the name implies, worked with practitioners and organisations who believed in and promoted positive benefits of being in nature via woodland activities; its research however sought to trouble taken for-granted assumptions by supporting new ways of looking at practice and place.

Conceptualising child-nature transaction in the woods

A wide range of feminist, social and relational theorists have been influential in new materialist explorations of how to frame the entangled, fluid communities or 'assemblages' of human and nonhuman activity that can comprise young people's experience (Taylor and Giugni 2012; Alldred and Fox 2017). Their interpretations challenge the traditional location of agency within human and nonhuman encounters, with 'affect' now belonging to temporary, *mutually* constituted associations between child and nature (Taylor and Giugni 2012, 82). The 'common world' interpretation for example, drawing on Donna Haraway amongst others, finds both child and nonhuman participants mutually transformed within their encounters, the legacy of which is carried into other meetings: links in a 'chain' of 'relationality' (Taylor and Giugni 2012, 112). This fluidity and relationality is also encompassed in the idea of cultureplace (Quay 2017).

Whilst children and nonhuman accomplices within places are positioned as linked, it is important to recognise that power is unevenly distributed across their interactions; 'common worlds relations are not reiterating harmonious Disney worlds … in which cute and innocent children and animals only ever frolic together as equals' (Taylor and Giugni 2012, 113). The responsibilities of being human within such associations, 'emotional, ethical, political, and cognitive' (Haraway and Goodeve 2000, 134), both remain and take on new dimensions through the acknowledgement that nonhumans are active, affective participants within those relations. Within the specific context of forestbased pedagogies, Pacini-Ketchabaw (2013, 355) advocates a common worlds perspective to move beyond what she terms the 'simplicity and innocence' that frequently characterise contemporary discussions of child-forest interactions. Paying attention to the interdependent relations of human and forest environment provides opportunities to recognise tensions.

> What are the (perhaps unintended) consequences of the frictions that occur when different kinds of bodies rub up against each other in the forest? … when a child trips over a stone … embedded in soil on the forest floor and unknowingly crushes a Douglas fir seedling. (Pacini-Ketchabaw 2013, 361)

In considering the degree to which trees may have agency in their entanglements within children's play, we cannot take an entirely arboreal perspective without anthropomorphising their participation to some degree (Gough 2016). Jones and Cloke (2008, 80–81) suggest that trees have four types of agency: everyday processes for life (reproduction, respiring etc.); creative reshaping of social and material contexts through these processes (sprouting somewhere unexpected); intentional actions where trees influence and exploit circumstances (most open to anthropomorphism); and involuntary actions, the impacts of their mere presence (such as emotional resonances within human culture). Certainly, the possibility of trees as purposeful actors in inter and

intra species relations is increasingly evidenced in explorations of their behaviours. Processes, formerly assumed to be available only to some animals and humans, including perception, memory, learning, decisionmaking and intra-species communication, have all been recently attributed to trees (Beresford-Kroeger 2010; Gagliano 2015, 2017; Gagliano, Mancuso, and Robert 2012). This revising and blurring of boundaries between what it is sentient/non-sentient is helpful in envisaging how agency moves within tree-people relations (Stephens, Taket, and Gagliano 2019). Plants, for example, interact with their environment through chemicals, conveying messages that are acted upon by recipients and as Gagliano and Grimonprez (2015) argue recognising language 'beyond words' both acknowledges plant agency and aspects of our kinship with them.

Similarly, there is increasing evidence that individuals of different species associate closely for significant parts of their life (Haskell 2017). Both trees and humans are holobionts, co-dependent with many other life forms within and external to our bodies; assemblages of different species together form ecological units (Mills et al. 2019). Many relationships between species are mutual and collaborative, maintained by communication and collective intelligence (Gagliano 2013; Stephens, Taket, and Gagliano 2019; Mills et al. 2019). Notably, Deleuze & Guattari use the concept of 'rhizomatic' relations to reconfigure ideas of relationality, moving away from hierarchical models of 'tree logic' (Deleuze and Guattari 1988, 13), which interpret relationships as linear, divided, dualistic and ranked (Doel 2000, 131). A rhizomatic perspective by contrast imagines relations as unanchored, associated, various, decentralised and flat (Doel 2000). Here, tree logic appears counter to new ways of understanding social and material relations. However, some argue that their symbiosis with other species makes trees particularly relevant metaphors for conceiving relational multiplicity and integration:

> Deleuze and Guattari are reductively (crudely) tough on arboreal thought, in my opinion, and the figure of the tree more generally. Advances in mycorrhizal fungal research have also given the lie to the tree as 'stopping' at its roots … . (Macfarlane 2018)

In our article, we suggest that including approximations of 'plant responses' supports an understanding of the complicated partnerships between plants, place and people in collective, intra-species, 'beyond words' dimensions of agency and symbiosis.

Play and playing back

Playwork researchers have similarly employed materialist perspectives to shift conceptions of affect and outcome and complicate instrumentalist interpretations of child-nature relations as pathways toward cognitive and physical benefit (Lester and Russell 2014; Russell 2015). Recognition of the constellations of agential relationality between child and environment, their capacity for interdependent and sometimes chance effects, requires less definition and categorisation of margins, limits and ends; for example, 'play and not-play, this play and that play, good play and bad play' (Russell 2015, 195). Play is framed as an open-ended impulse, pursued towards pleasurable relations and altered experience, arguably avoiding some of the restrictions of interpretations and campaigning that emphasise it as a route towards positive functioning (Lester and Russell 2014; Russell 2015).

This broader interpretation of play is useful in considering the position of trees within children's playful relationality. The impulse for play can be explored for instance in terms of 'autotelic' practices, relations between human and nonhuman that have no aim other than gratification of

themselves (Rautio 2013, 404). An example is picking up and carrying stones, where the child's satisfaction of an internal impulse to reach out and collect and nature's inspiration of this contact are arguably inseparable. The stone – its shape, weight, colour – calls out to be picked up, as a blackberry invites eating in a partnership of agential relations.

Experiencing emotional affect through play in wooded spaces

In the context of wooded spaces, children appear sometimes to express their experience of such interdependent partnerships in perceptions of trees and nature as discerning, intentional organisms and sources of emotive experience (Somner 2003, 192; Berger and Lahad 2010, 897; Hordyk, Dulude, and Shem 2015, 575). The interdependence of material and social worlds in 'affording' young people emotional experience has been termed 'Environmental Affect' (Roe and Aspinall 2011). Roe and Aspinall's (2011, 13) case study research of male forest school participants with 'extreme behavioural problems' spatialises emotional affect through mapping boy's experiences of positive and negative emotional states in relation to their material inspiration. Specific emotional outcomes are observed in young people's interactions with specific environments and the activity they cue: 'interest' stimulated when boys explore and negotiate the wider forest environment; 'trust and recollection' inside sheltered spaces and quieter places; and 'comfort and contentment' around the fire and cooking areas (Roe and Aspinall 2011, 14). Variations in young people's 'personality' are also felt to contribute to the environmental affordance achieved, with 'extroverts' spending more time around the fire, cooking and fire starting, and more 'introverted' participants ranging further afield, enjoying 'peace', 'quiet' and 'freedom' in less used areas, alongside imaginative game playing (Roe and Aspinall 2011). It is clearly challenging to include plant responses within this conception of the affective character of place and nature. How can we know what plants participating in these relations feel, positioned as we are in our human bodies and minds? However, as described above, a new materialist perspective might rather explore these human emotional impulses and their satisfaction as co-creations of places and people: partnerships of human and nature. Quay (2017) for example, conceives of partnerships of people and place producing activity and experience in the notion of 'cultureplace'. He proposes that discrete cultureplaces marry child and environment, each exclusive to temporary fusions of human and nonhuman participants, yet each also entangled with other cultureplaces too (Waite and Quay 2018, 12). This concept helps us to emphasise inseparability in entanglements of the material, cultural and personal and to combine new knowledge about plant agency with human activity and affect in our exploration of cultureplaces where human and nonhuman features mingle within imagined and material worlds.

New materialist perspectives on multi-species/matter relationality help to highlight what is conspicuous yet easily overlooked in these young people's observed preferences for play – that they are always in the company of trees and woodland terrain at FA. Moreover, multi-species play partnerships change and lift their emotional mood brought to FA from other places. We suggest that the plants may not simply afford such affect but are complicit in generating these shared cultureplaces. We follow Gough's proposal, within his appraisal of outdoor and environmental education research (2016, 11), that we can both acknowledge the 'irreducible anthropocentrism' within accounts of such nature-human relationality, whilst usefully employing a postparadigmatic 'assemblage' to conceive such relations. Wary of interpreting the actions and outcomes of young people's nature play purely in terms of associations with human health and wellbeing (Lester and Russell 2014), we consider frictions and affordances within these common worlds (Pacini-Ketchabaw 2013). New materialist 'microgeography' accounts of play may sometimes exclude a focus on the presence of socio-economic influences and inequalities (Horton and Kraftl 2018). In the intra-play at FA we sense the flow and influence of such forces. We argue that through childnature partnering, young people find valued opportunities to change their emotional mood and trees, to grow. Partnering is defined in the Oxford dictionary as 'a pair of people engaged together in the same

activity'. However, we suggest that it is not just people but trees, plants, place that partner a child in intra-play.

About the place: Fort Apache (FA) adventure playground

FA was situated on the woody edge of a hill, a former landfill site, bordering a large housing estate and playing field in an area amongst the 10% most deprived neighbourhoods in the country (Indices of deprivation n.d.). It was set up as part of the 'Exploring Nature Play' programme delivered by Play England during 2010–13, aiming to support children to grow their awareness of nature and its potential for play. In common with other adventure playgrounds, it adopted an ethos of unrestricted play and capitalised on natural features with two tree-house structures and loose parts such as ropes and nets within it. Heavily used independently by local children, play was occasionally supported playworkers, who led activities such as fires, cooking and green woodwork.

Unmanaged, FA's trees were mainly sycamore (Acer pseudoplatanus), non-native to the UK and sometimes regarded as a 'weed' (Woodland Trust 2017; GB Non-Native Species Secretariat 2017). They are vigorous, quickly colonising vacant land and cast dense shade, often leaving the ground beneath bare of other plants (GB Non-Native Species Secretariat 2017; Hein et al. 2009, 362). Small field maples (Acer campestre), and ash (Fraxinus excelsior) grew along the top boundary of the playground and allowed some understory of elder and hawthorn. Ivy (Hedera helix), bramble (Rubus fruticosus) and old man's beard (Clematis vitalba) wove themselves through the understory and wire fence at this upper boundary and bright green alexanders (Smyrnium olusatrum) were one of the few plants punctuating the well-worn slopes alongside some garden escapees. These species and their occupation of FA – opportunist, resilient plants able to grow on a former rubbish tip and survive the status of no-man's (or everyone's) land within a heavily residential area – can be seen as indicators of the place's peripheral social and economic status.

Research methods

The PR co-developed and refined her methodology over a year of working at FA in the composite identity of playworker, artist, scientist and researcher, and her research processes reflected these areas of practice. She aimed to establish and maintain a relationship with both place and people via artistic, playful interventions and data capture, responding to and articulating evidence from the fluid communities of human and more-than-human players. The PR undertook and reflected on interactions between themselves, the methods and the participants (including place) as a shared creation or 'social sculpture' (Sacks 2015); intra-activity that yielded clues to the relation of young people and nature (Wright, Goodenough, and Waite 2015).

She also paid close attention to the place and the plants that inhabited it, not only noting the types of tree and flora but also how they provoked responses in the young people and responded to children's play. In this way, through unspoken communication, plants in FA gained a voice. Observations and interpretations were made of landscape (terrain, flora, growth habits etc.) and children aged between 3 and 15 years1 (age, play habits, shape of movement and rest etc.) and the intra-play between them, using a sketchbook for written and drawn fieldnotes.

'Mapping' with the children attempted to capture and communicate the intra-activity of material and social (including researcher effects) as part of an ongoing conversation. This cartography employed layers of representation to include all partners, human and nonhuman. The first layer were abstract prints, the PR's interpretation of sketchbook field notes describing landscape and children's movements and actions within it. Rather than 'objective' diagrams of environment and

activity, these also included intangible aspects of place (ambience or sensations, for example). Children were then invited to describe their interpretations of the landscape, its uses and influence, through both creating new maps and/or annotating these prints. Several young people chose also to wear accelerometers capturing where they moved, how often and intensely, with results shared with them and the research team for further reflection. Finally, the PR and project researcher added a layer of data describing the site's material features, including trees (species, health, growth habit, etc.).

Inspired by young people's collections of interesting finds from the former rubbish dump underlying FA's woodland, the methodology also sought to engage children through fantastical interventions, staging provocations aimed at initiating a playful conversation. These included an installation which furnished a tree house for a tea party (Wright, Goodenough, and Waite 2015). In addition, walking interviews with children as 'conversational drift' (Adcock 1992), encouraged child-led activity and conversations. These active, physical tours of played space interwove the material nature of the site within conversations and impressions (Wright, Goodenough, and Waite 2015).

Plymouth University's ethics committee provided ethical approval for the study and children's consent to take part was sought and checked repeatedly, alongside parental consent for their involvement. All children's names are pseudonyms (Figures 1–3).
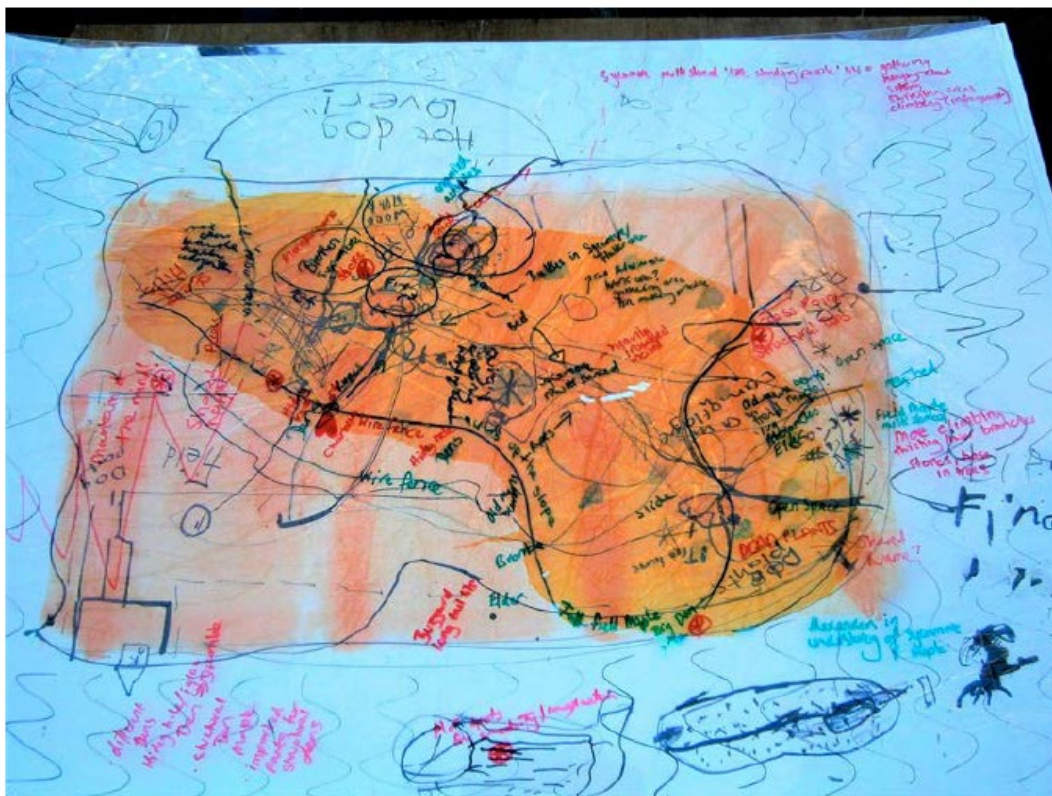

FIGURE 1 'MAP' OF MATERIAL & SOCIAL ENVIRONMENT AT FORT APACHE.

FIGURE 2 BURNT & BARK STRIPPED STEMMED SYCAMORE: CHILDREN'S ALTERNATIVE HEARTH AND HOME.

Place as partner: our findings

In FA, trees and topography were visibly impacted by children's activity and children's use of different spaces and species appears responsive to plants' invitations. The following sections describe some of the core activities observed at FA, their relationship with the material nature of the site and instances where participants described the emotional content of these transactions. Italicised sections are based on the PR's sketchbook fieldnotes and each subtitle provides an example of a partnership between place and children.

Climbing and being high

Mark (9) led the researcher to what he described as his 'bedroom', a sawn-off trunk four or five feet up in a multi-stemmed sycamore where he imagined he could sleep. The researcher noticed the close correspondence between Mark's body's resting shape and the tree limbs, his form echoing the tree as he found its support. He liked using play nets suspended by playworkers and constructing dens with sticks but doubted his building skills. He also enjoyed the most colourful tree house where

FIGURE 3 STRIPPED BARK AND INKED FIELD MAPLE: TREES HOLDING MESSAGES AND FEELINGS FOR CHILDREN.

he could sit and enjoy its views of FA and what his friend described as the 'fresh air' reached up there.

Mark moulded himself to the contours of the tree, finding a shape that held him, high up, without the need for construction. Different aspects of FA's environment appeared to invite young players to climb and enjoy the sensations accompanying being raised up. Three tree houses built by adults in collaboration with young people acted as places to congregate and socialise in semi-private space and were enjoyed for the physical sensations they provoked and their offer of altered perspectives on their surroundings.

Close to the fire pit at the centre of the site, two mature multi-stemmed sycamores were prominent within play activity. Facing each other, these trees were heavily used as resting and assembly points. Their thickness, upright stance, spacing and absence of low branches supported children leaning amongst them. Bark was stripped from their lower areas and one was particularly incised with initials and marks; the other scorched by a fire lit within its circumference. These trees were an integral part of children's occupation of FA, gathering places where identities could be inscribed. Whilst the fire pit was the official site for congregating, these trees attracted transitory residence.

The co-constructed treehouses were also graffitied and set fire to, but unable to grow back, were less enduring of rough treatment than unadulterated nature. Both treehouses and hammocks suspended by playworkers provided elevation and different viewpoints. Like others, Sian (9) valued these alternative sensory experiences: *They're just one of my favourites [the hammocks] … They make me feel peaceful when I lie down, and you can look up and stare at the sky and all the trees …*

Roughly one third of FA was sloping land shaded by mature trees, dubbed by some children as 'the Forest'. This slope was also used for climbing (facilitated by playworkers attaching ropes to trees) as well as sliding. The action of children's bodies and feet, alongside leafy shade, kept it relatively free of ground flora. The steepest area appeared in players' mapping and tours as an important landscape feature referred to as the 'big hills' and 'mountain/s'. The challenge and opportunities the slopes provided in the context of FA magnified their scale, even accounting for players' relatively small stature: *If Fort Apache wasn't a little bit dangerous it wouldn't be that fun … Because there's some mountains and they're dangerous, but they're really fun to climb up and down … In winter they're really slippery and in summer they're really crumbly (Billy, 9)*. Billy's endorsement of FA topography and its affordance for risk taking acknowledges this place as his partner. Liaison with its dangerous contours through intra-play is what makes it so attractive to him. It can be 'riskplayslipslope' in collusion with Billy, to use Quay's cultureplace analogy, just as Mark's branch for a bedroom could be 'resttree' in collaboration with his body.

Material transformations

Martin (10) was a relatively new visitor to FA, recently discovering the site whilst wandering with friends. Martin's appreciation of FA derived from both solitary activity and social, peer-group experiences and the freedom to move between both to meet one's needs: 'sometimes [we] all do things, sometimes play games … sometimes we fall out … we all have a good time here … So I go [to FA] to be with people and just have fun … it's nice to come here [pause], it's nice to be on your own, be by yourself and just, you know'. He enjoyed focused purposeful material interactions, particularly those producing dramatic transformations, including chopping wood, making fires, cooking food and building dens. Of the activities Martin appreciated, many were facilitated by playworkers and enjoyed within groups on FA's flatter areas.

Martin's experiences reflect how place, as well as people, supported him feeling good. When he enjoys chopping wood or making fires, he feels good in transformative relation with the material world. Likewise, when he describes the pleasure of being 'alone', he feels good in the company of nature. This highlights too that multiple cultureplaces co-existed at FA; certain natural spaces seemed to lend themselves to particular associations/transformations and these were selected by young people and moved between. Most young people regularly used the central flatter area of FA near the fire-pit. Physical wellbeing from food, warmth, and nearby shelter as well as running, walking, crafting, large scale games such as battles and gathering resources for playing and making were experienced here. The larger, group games here were an added attraction of FA: *It's lively, it's fun, there's things to do and you'll never get down … because everyone's here to play, if you're sad you can just show up and then they'll come play with you (Simon, 10).* Chances to meet others and make friends in the open space were the site's most significant attribute for some. Playworkers also created opportunities in FA's central area for socialising over supervised transaction with the environment, such as green woodworking and collecting fuel: *Getting close to nature [is something special at FA].., because I barely get out no more.., so I come here now … because, you learn more stuff out in nature, like different types of tree wood and stuff and then which wood's green and which wood's not (John, 10).*

Trees and sticks appeared a particularly important tool of play frequently furnishing imaginary scenarios and playful social relations. Sticks were nature's 'loose parts' enabling construction of spaces, objects and play that altered the material, cultural and emotional texture of FA. The researcher watched sticks re-imagined into monsters requiring teams of players to vanquish them, and they were frequently picked up or torn off and transported to other places to arouse new play. The sloping area of FA was punctuated by mature sycamore with twiggy outgrowth at their base. This basal growth was continually coppiced and collected by young people. This harvesting appears an unusual form of arboriculture that responds to a tree's reaction to stress or competition for sunlight (basal outgrowth producing increased leaf cover) and stimulates the response further (by increasing stress and further removing leaf cover). Many trees at FA showed effects of pruning for sticks, for fire-making, construction, role play or perhaps as a reaction to being amongst trees, an autotelic response to the presence of snappy shoots and branches (Rautio 2013).

Social relations and spaces

Hayley (10) frequently used to visit FA, but stopped after falling out with someone, returning only recently. The PR spoke to Hayley as she competed with a friend to find ever bigger sticks to feed the fire. Hayley enjoyed FA for its support of activity beyond everyday experiences: 'I think Fort Apache's like a brilliant place 'cos you don't have to stay at home and watch the news; you get to learn activities that you've never done before'.

She described both imagined and material details structuring the 'war games' that she frequently played at FA, where complex interpersonal scenarios involving 10–20 people were acted out in selected natural settings:

> the mother and daughter had to run away 'cos father wasn't in the game, he'd like gone to war … the daughter was 16 and the mother was about in her 40's and they decided to go to the war to help the father out … then the father goes looking for them, but the father goes to the jungle and the mother and daughter are like in this cave … it's [the cave play setting] like near; it was like in these like trees … everybody just like got together and like helped the mother and daughter out.

FA was transformable into a different world for Hayley, where partnership with the natural world made possible new ways of being and behaving. Much child-led social activity at FA was battling role play, taking place throughout the landscape. Trees and topography provided an environment where incursions into combat could be made, but importantly also effective retreats. Len (10), for example, valued the *camouflage* of leafy field maples and withered herbaceous plants, whilst Craig (7), enjoyed the vantage points of FA's dens for *shooting* others with *guns* (sticks) whilst hiding, and Dean (10), found sites where he could store his collected weaponry (sticks) and *practice my moves … my fighting*. FA was a site both of social conflict and conflict resolution and its varied material environs became partners in battle play.

Shelter and solace in the company of trees

Amy (9) had been visiting FA for about a year to 'escape from being near my sisters' who woke her at night, and enjoy time with friends, making dens and getting warm by the fire. She established her dens, 'places you won't see or think of', along FA's long woodland boundary at the top of its slopes, separated from a grassed playing field by wire fencing. The fence supported bramble and ivy to spill over shrubby hawthorn, field maple and elder, forming natural cubby holes frequently occupied as

readymade dens, the ground underneath worn and plant-free through constant use. Amy, whilst acknowledging such heavy usage, was clear she used these places to remove herself from playmates and experience her emotional mood in the company of nature.

That tree was there, and you could sit down on it … if you were a bit upset and you went to Fort Apache you could just go sit in there quietly … . there's like loads of little trails that go along there, along the top … you know where that big bush is there? … There's like this little hole in there … You can fit in there … there's a little cubby hole and you can see the tree house … Up there, that little bush is part of my den as well; so that I can sit in there and have more quietness and if it rains it won't get me wet that much.

Amy's described partnership with material features of FA suggested that she sought not only solitude but solace when unhappy. The fallen tree allowing quiet sitting and bushes that protected physically from weather and emotionally from stressful bustle were her partners in securing her wellbeing. FA's woodland environment supported her taking shelter, both materially and emotionally.

Den building and occupying or playing with natural shelter were common activities. Cubby holes and dens featured strongly in walking interviews. Whilst leading these expeditions, players emphasised material and imagined boundaries of the sequestered space of dens, asking that a 'code' be entered for access, for example. Dens providing personal space and an outlook over more public places at FA were highly valued. Whilst conventionally an 'adventure playground' is perhaps associated with dynamic activity, social and physical, players more often discussed more solitary relaxation and recuperation with the researcher: *There used to be a really good one [den] … that was really hidden but … I like hiding … I like just being where people can't go … like no one uses them, or I can be by myself (Ricky, 13).* Alongside the cubby holes of the fenced woodland boundary, two other sites frequently provided hiding and sheltering places. The 'dead plants' or 'deadly' place, comprised adjoining open land carpeted with tall dry stalks and dead flower heads of umbelliferae (including fennel and alexanders), valued for camouflaged concealment. Close by, this boundary land was populated by mature, short and multi-stemmed field maple within which players built dens.

Dean had several well-established dens at FA in densely spaced, small field maples, next to area known as 'dead plants'. Like Amy, Dean used FA to get away from the interpersonal context of home and that FA's material and social environments allowed him to change his emotional state of mind: 'Cos at home my brother – my … brother … My brother … he annoys me so I come here and then it calms me down [later in conversation] Because I can get really angry. I can get really angry, really easily. And it's not very nice'. Dean showed the researcher discrete spaces, some of which he termed 'rooms', within the landscape of the maples, describing how he explored and managed impulses and feelings within these. One 'the bedroom,' a hollow surrounded by tree trunks accessed via a climb, is where he went to 'sleep'. He estimated that within such places it took him 5 to 15 minutes to feel calmer, which he felt was a long time. Another den area was used for 'target practice', a space in which he behaved and felt differently than in his 'bed': 'I can come here ['bed' branch of field maple] and calm down and then I love that, then on the practice one, I practice fighting with invisible people'. Dean regularly placed found objects within his den, sometimes searching for them with friends, which he used as prompts to remember. He described how they and the experience of finding them enabled him to look into the past: 'It [looking at the object] kind of makes me … flashback in my head … and vision in the past of that and how I found it … I have a vision or flashback and I can see them in my life, and it makes me remember that – if I lost something – and I pick it up [and remember] – like my budgie and Bob … cos Bob's away.'

Places in FA offer Dean a response to his different moods and ways to access and regulate his feelings. Partnering with specific places helped him alter mood and alleviate discomfort. Like Amy, he found trees with which to express and process his emotional state. His use of natural and found totems support recall; the items seeming to act as transitional objects of some type, helping him to move back and forth between the past and here and now.

It seems counterintuitive that tree trunks or branches, relatively hard and inflexible, provided support for relaxing, but several children referred to this function. Young people repeatedly presented trees as emotional and material shelter in intentional contrast to their everyday settings. The maple trees provided low growing, twisting branches (absent from mature sycamore) and prominent root systems that could form a 'nest' and support platforms and objects to co-create a desirable playspace for Dean. Unlike the dense shade of sycamore, light filtering between maple leaves permits herb layer growth, making hidden spaces. The maple's cork like bark was frequently broken and stripped by players. The trees responded with scar tissue that formed an artistic frame for written and incised feelings and marks. Although feelings may be transitory, the trees became permanent markers of emotion.

Daydreaming with nature

Getting 'mucky' was an attraction of FA for Carina (9) and, like Hayley, she enjoyed opportunities for exciting, physical and social activity, often facilitated by playworkers: 'it's more adventures than the old boring thing at home, cos you never know what's going to happen'. She too used FA's landscapes, like Amy and Dean, to experience a contrast to domestic family spaces, whilst still feeling at 'home': '[When I'm playing in my den it] Gives me more of a homey feeling … cos it gives me comfort knowing I'm just alone, there's no one to budge out … especially with 9 cats and a mummy and daddy who always boss you around. They are always crazy to me to do the ironing, wash up'.

Carina described five separate dens, including some particularly prized cubby holes located on FA's steep slope, accessed by using 'friendly nature': 'if you go this way you might have a really, really adventurous life … that one's with nature … grab hold of nature, grab hold of trees and then you go down with them … they're friendly nature!'. Like others, Carina described some areas of her dens as more private, domestic spaces of which she was the owner, in one instance leading the researcher (or 'visitor') into a 'garden' where they could 'chillax' in a 'natural', 'quieter' area whilst listening to bird song, away from the 'screaming and shouting' of FA. In such a place, she suggested, 'A little squirrel might even stand in your arms and then you can give it a nice huggle'. Carina enjoyed 'daydreaming' at FA and invited the researcher to enter her fantasy play, warning for example that a log she held and laid in a bed could be heard 'doing a bit of sleep talking' and they had better be careful not to 'disturb his natural behaviour'. She understood daydreams to sometimes be illusory wish fulfilment but enjoyed them nevertheless: 'Daydreaming – love. Sometimes daydreaming that a squirrel might fall into my arms … [daydreaming] when I'm lying down on my back or sitting down'

Carina's embodied and visceral experiences in nature underpinned her imagined relationship with the nonhuman world. Away from home life expectations, Carina was free to imagine other ways of being; nature as practical friendly partner in helping her access these other existences. Nature also supplied inspiration and material with which she could achieve emotional expression: transitioning to a 'daydreaming' place where she might practice caring relationships, with 'squirrels' who can hug and baby logs who dream.

Trees produced spaces and materials that cued creative invention of creatures and characters that could help meet player's affective aims. As Waters (2011, 10) notes: 'From a narrative standpoint, all environments are playable … landscapes imbued with a play language, whereby children are the

primary readers.' Dean, like Carina, enjoyed imagining companions to battle or befriend: *'He [imagined friend] kind of looks after my base at night and he does a very good job and … he does climb onto me sometimes … We hang out sometimes a lot as well … He was talking to me [right now] … He's afraid to come out at the morning time, but if he wants to, he will'.*

Discussion

Young people and material environment at FA co-created substantive and emotional changes and outcomes through play. Different tree and plant species and the spaces they formed and punctuated helped define children's play and feelings; whilst children's regular intra-play with them correspondingly shaped their appearance and character. Children's play within the wooded landscape of FA is fundamentally relational as Aziz and Said (2016, 4) assert 'environment and activity cannot be fully understood outside of their mutual context'.

FA embodied cultures of play and activity that responded to and harnessed biotic processes of plants, trees and woodland. Multi-stemmed trees and low branches invited leaning, sitting and lying. Trees and woodland topography provided rest and resources to actuate imagined scenarios. Sticks and logs, alongside random found objects, furnished creative and constructive play and transition to imagined environments. Branches were babies, creatures, or weapons; they marked boundaries and built houses. Alongside their creative re-use, the snapping of twigs and picking of bark, perhaps for no purpose other than providing satisfactory feedback to hands and fingers was widespread. Trees were implicated in play and provoked behaviours. This might be viewed simply as part of the messy entanglements of the human and nonhuman world, but we suggest, following Quay (2017), that partnerships were observable between *individuals* and *specific materiality* within our data, meeting and accommodating needs: a complexity of multiple cultureplaces burgeoning within the regrowth woodland and adventure play context. The steep and scrubby site was used harshly yet was resilient in its partnering with children, the sycamore, field maple and brambles overlaying the old tip achieving new affective value through playful interactions.

There were frequent instances of sensory engagement and immersion: time spent eating or enjoying warmth round the fire, light through leaves, pleasant airiness of treehouses, listening to birds, snapping sticks or peeling bark. Notably at FA however, young people also found spaces that physically supported them. The two sycamores, for example, allowed young people to gather together within their perimeter, leaning against their multiple stems, the collected vertical trunks mirroring the figures of players and vice-versa. The provision of physical touch is an important aspect of feeling emotionally secure (Steckley 2011, 538–541), understood to support emotional and physical regulation, and players certainly sought and enjoyed palpable intimacy with and support from trees at FA. Some experienced opportunities to express and process difficult emotions whilst feeling physically contained by trees and wooded space. Trees were sometimes damaged in inviting gathering and reclining, bark incised, twigs snapped or perhaps even burnt. Another outcome, however, was that surrounding ground was well-trodden and consequently free of plants that might compete for light or space. Likewise, on FA's steep banks mature sycamore's shading out of ground cover enabled young people to slide down and scale bare 'mountains', while removing potentially competing flora. Stick snapping also took place amongst these trees rooted upon the slopes, which appeared to respond with increased growth. Finally, trees' entanglement in children's affective play at FA was tied to the presence of playworkers and their care for and management of the site.

Elevated spaces and natural hidey-holes within trees, providing shelter, camouflage and concealment during games and quieter times, were also highly valued at FA. Concealment, views

and rests provided by wooded terrain were associated with opportunities to be supine and calm. Players' uptake of varied material opportunities create cultureplaces that enable access to certain emotional moods, echoing some of Roe and Aspinall's (2011) findings about environmental affect at forest school. Many FA players seemed particularly appreciative of how woodland partnered them in relaxation, and escape from difficult emotional contexts. Notably, when respondents described being 'alone' or 'quiet' at FA, they also explicitly described their relations with nature during such moments, away from human contact, but fully in exchange with nonhuman players.

This study also evidences young people's employment of imaginative strategies to reinforce temporary removal from human contact and intensification of intimacy with nature within sheltering spaces. Pretend guards, technology, domestic features and physical boundary markers could all contribute to a sense of separation from human activity and closeness with the nonhuman world. Child, material place and objects collaborated in production of sheltering space. Human experiences of sensory immersion in nature, alongside the consistency of its presence and processes are identified by Hordyk, Dulude, and Shem (2015, 575–577), as indicators of its capacity to provide an emotionally and physically secure place for children.

Several theoretical processes associated with green space may also have contributed to the emotional outcomes described, such as attention restoration and meeting of biophilic needs (Kaplan 1995; Kahn and Kellert 2002; Sobel 2004). However, alterations in mood were also associated with opportunities to move between reality and fantasy and inspire consideration of how imagination may be a route to increasing relationality, entanglement, and intimacy with nature and how environment can inspire and cue such imaginative leaps. Together trees and children created a third space of intra-play where Carina imagined log babies or Dean fought with invisible people and befriended a tunnel-dwelling creature. Solace was sought and found through playful partnership with place, an entanglement of fantasy and common worlds, a valuable escape for children from other sometimes troublesome material and interpersonal situations.

Conclusion

This case study has helped us shine a light on thinking that informed our original bid for funding for Good from Woods and continues to shape much research in the field of outdoor learning, that the natural environment is a source of ecosystem services for human health and wellbeing. New materialism offers a way to redress privileged anthropocentric viewpoints and acknowledge the material world as agential. Gough (2016) cautions that realising this ambition is not straightforward because we use language to represent data, and ideas involving the nonhuman are mediated through human perception. However, the 'plant responses' catalogued in this research have contributed to a conception of relations of young people with nature where place is partner in merged experiences. We have drawn on Quay's notion of cultureplace to express partnerships played out in elisions of children and place. Evidence generated suggests symbioses of childnature are one of the ways in which wellbeing is promoted in FA through supporting the processing of emotional states within nature. Some readers may be shocked at the treatment trees and environment received at the hands of young people, but we suggest this material 'vandalism' was inherent in the mutuality of cultureplace.

We deliberately included plant responses in our examination and discussion of this case of woodland play. Despite this attempt to capture the sense of intra-play, our argument still relies on anthropocentric viewpoints. For example, we draw attention to the ways in which children feel good playing with trees, yet we cannot articulate the affective responses of the flora involved. Moving

from an outcome focus might have provided a more equal common worlds account (Pacini-Ketchabaw, Taylor, and Blaise 2016) but a child-centred narrative is the legacy of our funded research. Furthermore, we would argue that within common world's play perspectives, it is important not to lose sight of the political realities woven throughout social-material relations (Horton and Kraftl 2018). Both humans and trees can be understood to be players in their reactions to these pressures and opportunities. They both demonstrate creative reactions to stress and opportunity in their responses to marginality and their responses are intimately and inextricably interwoven. The life processes of FA's trees respond to the impacts of the area's socio-economic liminality. From opportunist colonisers of a disused tip, largely uncared for, they become central players in a new 'public' playspace. Young people's behaviours similarly exploit chances and react to tensions associated with their socio-spatial experience. They too are opportunistic, seeking fun and respite from other experiences in partnerships with nature. Trees have involuntary agency through their presence in children's imaginative world, but they also display other forms of response, creative colonisation and intra-play with children's actions, to occupy and shape this place (Jones and Cloke 2008).

Place attachment here is not premised on a romantic view of nature as precious and remote, but as a partner that responds and endures. Far from wilderness untouched by human or manicured park designed for children's safe use, this small corner of woodland ruggedly and impartially accommodated human and nonhuman. Yet, this also raises questions about what other experiences/cultureplaces are needed to support young people to foreground human responsibility within such partnerships and the benefits of nurturing trees (Lenz Taguchi 2011; Askerlund and Almers 2016). Trees and terrain at FA were deeply marked by young people's use of them: growth snapped, bark picked, trunks scorched, earth worn smooth. Trees were illustrated and written upon and finds from elsewhere imported and wedged within their branches. The intensity of the partnership of young people and wooded environment was clear. Whilst this heavy usage impacted and altered the woodland, like the children, it responded with resilience by continuing to grow. Interestingly, FA moved elsewhere some years later because vandalism and other human impacts were deemed to have made the place unsafe for children, a reminder that our partnerships with the more-than-human are frequently far from equal.

Notes

1. It is notable that most respondents discussed in this article were aged between 10 or 11. This may represent the most common age at which young people's desire to play at Fort Apache was matched with their ability to frequently, independently access it. It may also partly reflect this age group's relative enthusiasm for the playful research methods employed.

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