Bushcraft Education as Radical Pedagogy

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Abstract

Bushcraft emerged from indigenous knowledge with a skill-base used for military, commercial and recreational purposes. We identify it as embodied contextual learning, *for* and *with* the environment, arising from a deep inter-subjective relationship with the natural world. This focus suggests a 'conscientization' developing a critical awareness, transformative of society's relationship with ecosystems and providing autonomous, individual learning. Bushcraft education has gained in popularity in recent years and we seek to problematise and define its educational identity as it appears rarely in mainstream or outdoor education. Accordingly, we suggest that bushcraft education shares some of the aims of radical education, signalled by the transformative purpose in which radical pedagogies are positioned, normally situated outside mainstream formal education. We conclude that bushcraft education may have global significance as radical pedagogy, progressing deeper understandings of the relationship between self and nature, and in transdisciplinary thinking supporting our response to current environmental crises.

Key words: bushcraft; bushcraft education; radical pedagogy; outdoor education; transdisciplinary

Bushcraft education offers a pedagogy with a transformative purpose normally situated outside mainstream formal education. Its genesis and development from bushcraft practice inform its current educational identity, which we suggest is radical pedagogy. Bushcraft education is important in a global context to progress understandings of the relationship between self and nature, and in transdisciplinary debate. This paper provides new evidence for it as embodied contextual approach to learning and its unique contribution to (outdoor) education through intertwined ideologies and practices.

Origins of bushcraft practice

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When the Pilgrim Fathers landed in North America they carried with them a wealth of 'local traditional knowledge'. Back in Britain they had used herbal medicine, caught fish and wildlife for the pot, and crafted many artefacts: they had developed a skilful relationship with flora and fauna as a usual part of their everyday life. But when they were on their homeground, they knew the local botany, the habits and habitats of local wildlife, the vagaries of their landscape and the moods of its seasons. Now, in 1620, they were in a different locality, a broadly similar biome but with a strange flora, fauna, geology, and climate. They were literally bewildered, confused by a land that was as unfamiliar as it was unrestricted. Had it not been for the generosity of tribes such as the Cherokee, who shared their own local indigenous knowledge, the settlers would have died in the midst of plenty, deskilled by their new locality, not knowing how to live within the affordances its environment made available (Mears 2014).¹

These essentially social interactions with First Nations' peoples enabled a reciprocal exchange of resources, technologies, and techniques, so that knowledge, crafts, and skills began to evolve syncretically. Learning, adopting, and adapting new ways of doing familiar tasks was and is a staple of developing craftsmanship, for example, in extending a repertoire from basket-making with willow to using rush or split hazel, in locations where those materials become available. As a historical moment, therefore, the entry of these early settlers into America provides a touchstone for the genesis of bushcraft practice, marking a development from the pastoralism of familiar, locally-situated rural crafts into an expeditionary intention of inhabiting new landscapes in order to move through them to new localities. Developing a range of local indigenous knowledges is essential as a life-and-death matter when moving between continents and biomes.

Bushcraft's genesis is vernacular, therefore, formed from a desire to live symbiotically with other places and peoples, and a need to learn land-based skills to travel through and live within non-urban landscapes. It is not inevitably colonial or post-colonial: it is not the practice itself but some of its historical purposes that colour it in that way. Nor is it about living in the 'wild', for when you are knowledgeable about a place's affordances and working harmoniously with them, it is no longer wild but home. But these vernacular origins were rapidly obscured and diverted by the great European military and commercial expansionist project: colonialism and Empire.

The development of the land-based skills were vital to the Enlightenment inland exploration. Bushcraft, the ability to move through or live with minimal resources in remote natural landscapes, became valuable knowledge in enabling European land-based military activity,

especially in the adoption of guerrilla warfare tactics from indigenous allies. High levels of technique had to be developed to buttress low-level technology. In this way explorers and pioneers utilising these techniques became associated with the conditions of the frontier (Morris 1996, 31).

Naturalists and explorers drew freely on indigenous knowledge as a source of useful information about the natural world (Clarke 2013; Webb 2012; Ellen 2004; Ellen and Harris 2000; Turnbull 2000). However, much of the process of absorbing indigenous knowledge into Western bushcraft passed unrecorded. As postcolonial theory indicates, this was at least partly due to colonists' view that endowment of Eurocentric sophistication from centre to periphery was payment enough for the cultural wealth they appropriated (Battiste and Henderson 2000, 22). So, although Western biomedical knowledge developed from crosscultural European borrowing of the medical treatments of indigenous populations, initially acknowledged as a distinct body of curing knowledge called 'Indian medicine', eventually this knowledge was assimilated into official European pharmacopoeias (Webb 2012, 59). 'Indian medicine' was displaced by the notion of a universal type of 'knowledge of the land' (Webb 2012, 59) which, it was assumed, would eventually become apparent to anyone who inhabited it and for which indigenous people deserved no especial credit. Thus, 'once ethnobiological knowledge had been drawn within the orbit of modern science and its origins forgotten, it became difficult to know where to place the boundary between the two' (Ellen 2004).

The growth of radical education

Established by a series of Acts of Parliament in Britain from 1870 onwards, state school education found its genesis in a liberal ideology as both a social good and a form of social engineering, enabling citizens better to endure or enjoy the culture that governed them. Applying Imperial values to a domestic population, the compulsory liberal education resulting from the 1902 Education Act set out to improve the British population and better fit them for the social and vocational roles they were meant to occupy. Concurrently, though, radical education began to emerge as a reaction against such vocational instrumentalisation, developing 'outside the dominant streams of educational development' (Spring 1975, 9), defined by their focus on the development of children as individuals, and a concern that:

schooling under the control of a national government inevitably leads to attempts by the educational system to produce citizens who will be blindly obedient to the dictates of that government, citizens who will uphold the authority of that government even when it runs counter to personal interest and reason and who will adopt a nationalistic posture of "my country, right or wrong" (Spring 1975, 13-14)

Where state-supported education was 'directed at reforming society rather than radically changing it': radical education sought a transformation of society by educating its members in autonomy rather than obedience (Playdon 2000). It set out to 'create a non-authoritarian person who will not obediently accept the dictates of the political and social system and who will demand greater personal control and choice' (Spring 1975, 14). This was to be achieved by teachers who were 'on the side of the child' and actively engaged in 'helping a child to come to terms with his own inner life' (Child and Child, 1969, 149) as their prime task.

In the UK, the most visible roots of radical education were political, as 'that tradition which sees educational change as a key aspect (or component) of radical social change' (Simon, 1972); and the so-called 'new psychology' stimulated especially by Freud, Jung and Adler (Stewart, 1968). It expressed itself in a broad range of principles and practices, ranging from 'progressives' who provided a more humane version of mainstream education, to 'emancipators' who explored the limits of educational freedom. Pedagogically, its theorists were typically also its practitioners, a remarkable, international group of teachers and writers: Fröbel in Germany, Pestalozzi in Switzerland, Dewey in the US, Montessori in Italy, Steiner in Austria, and later, Freire in Brazil, and Neill in the UK. Their shared interest in broadly 'child-centred' progressive approaches focused on, as Dewey put it, 'the potentialities of education when it is treated as intelligently directed development of the possibilities inherent in ordinary experience', which is 'always the actual life-experience of some individual' (Dewey 1963, 13.61). Two educators in particular drew from this rich intellectual field to develop strongly radical practice: A S Neill and Paulo Freire. It is in their work that we seek parallels for bushcraft education.

A S Neill's world-famous Summerhill School began as an international school in Hellerau, near Dresden, finally locating itself in Leiston, Suffolk, UK in 1924, where it still thrives, providing over a hundred years of continuity in radical education practice. Neill himself wrote extensively about his pedagogy, summarising his concerns and approaches in *Summerhill: A radical approach to education* (1962). Key to these, and distinguishing his work from that of the 'progressives', are 'the basic premise of choice and voluntarism at Summerhill [which] gives notions such as child-centredness and autonomy different meanings from their counterparts in mainstream education' (Goodsman1992, 163). Neill made a distinction

between 'freedom' and 'licence', where 'freedom' means children make decisions about their own lives but must consider the impact of their decisions on others. If their actions negatively impact on others, they become 'licence': for example, pupils are free to choose whether or not to attend lessons but if they do attend, they may not disrupt them, since that would impact negatively on other pupils and their teacher. The focus is on developing relationality, positioning individual development within the community an individual has chosen to occupy as Neill put it (1962, 356):

True self-discipline does *not* involve repression or acceptance. It considers the rights and happiness of others. It leads the individual deliberately to seek to live at peace with others by conceding something to their point of view.

Freire's educational philosophy argued against the 'banking' concept of education, in which students are positioned as "receptacles" to be "filled" by the teacher, knowledge as 'a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing' (Freire 1971, 53). This is the pedagogical view espoused by colonisers, and Freire identifies it as 'a characteristic of the ideology of oppression' which 'negates education and knowledge as processes of inquiry'. Instead, he says, democratised education can only proceed 'by means of the praxis: reflection and action upon the world in order to transform it' (Freire 1971, 33). This 'problem-posing' approach positions teacher and learner in an equal, shared inquiry. Their shared focus is on 'the great humanistic and historical task of the oppressed: to liberate themselves and their oppressors as well' (Freire 1971, 26), for both teacher and learner are degraded by mechanistic 'banking', teachers turned into production line operatives and pupils objectivised as products. Instead, Freire says, through dialogic praxis both learner and teacher find 'conscientization', a consciously critical awareness which reveals injustice and begins the process of release from it. In 1988, the Education Reform Act initiated a National Curriculum for England challenging 'the professionalism and independence of teachers' (Chitty 1992, 48) and a new system of inspection, the Office for Standards in Education [Ofsted] was created in 1992. In contrast to the previous inspectorate, Ofsted requires no subject specialism from its inspectors, since 'what goes on inside the pupils' heads, and what happens to them in their own lives, is irrelevant' (Cullingford 1999, 4). Ofsted reflected that with a mechanistic, production-line system of education, in which (Cullingford 1999, 4) 'the pupils count insofar as they are the "products". To the eye of radical educators, it looked like the blanket imposition of a banking system, in which children became accounts into which information was deposited with the intention of drawing future dividends on that investment. Criticality and creativity seemed to have been diminished for both teachers and learners.

Radical pedagogies continued to flourish, but they were largely outside the state system, in home schooling, the small schools' movement, or progressive schools such as Summerhill. There were tensions. Ofsted's refusal to meet Summerhill School on its own terms (children are self-governing, lessons are not compulsory, results are above national standard, and 'there is the highest possible level of parental satisfaction') led to an attempt to close it down, resulting in court action (Playdon 2000), abandoned after a settlement was reached between government and school.

The emergence of bushcraft education

By the turn of the twentieth century, militarism, the appropriation and absorption of traditional indigenous knowledges, and education as social engineering had united to form new youth movements. Drawing on early self-help manuals such as Galton's (1855) The Art of Travel and military-commercial enterprises like the British 'School for Colonial-Craft', the non-formal educational structures of Scouting and Woodcraft emerged. A mythologised reality of the imperial frontier supported this new institutionalisation of woodcraft skills. It repurposed woodcraft, scouting and exploring knowledge from militaristic colonial frontier practices for reconnaissance and intelligence gathering, into a peace-time practice for rehabilitating, invigorating and educating youth. Knowledge of woodcraft became part of the instructional development of youth, appropriate for character building and 'good citizenship' - for the benefit of an urbanised society. In this way, from the beginning of the twentieth century, the skills of woodcraft and scouting were reconfigured into what might be broadly considered educational and remedial practices, specified by instructional manuals, which framed the relationship between teachers and learners. Initially aimed primarily at boys, these youth movements shared the common aspiration of using woodcraft and 'nature' to engage youths and develop desired masculine qualities such as athleticism, resourcefulness and independence.

Meanwhile, Bushcraft was emerging as an educational practice, developing out of three principal fields: indigenous knowledges; military survival; and the wilderness recreation, which youth movements had developed out of professional expeditioning (Fenton 2016). Notable practitioners were emerging across the world, such as Les Hiddins in Australia, Larry Dean Olsen and David Westcott in the USA, Mors Kochanski in Canada, Lars Fält in Sweden (where the pedagogical traditions of friluftsliv or 'open-air-living', and sloyd, 'making things with your hands', were part of the mainstream curriculum), and in the UK, John 'Lofty' Wiseman and Ray Mears. Larry Dean Olsen, Dave Westcott, and Mors Kochanski's practice

emerged from outdoor education, while Les Hiddens, Lars Fält and Lofty Wiseman had military training backgrounds. But all were informed by indigenous knowledges from different parts of the globe, and all were engaged in repurposing a wide range of skills and knowledge to form the new and distinctive discipline of bushcraft.

In the UK, this novel pedagogy was formed into a distinctive pedagogy by the work of Ray Mears, who began teaching in 1983. Mears adopted the term 'bushcraft' for his practice to distinguish it from the more long-term aims of 'wilderness living', and from pure military-style tactical escape and evasion 'survival'. He formulates bushcraft as 'knowledge of nature that enables you to travel safely, relying upon nature to some extent for your sustenance and support ... a blending of old and new ... and at its core is a love and understanding of nature' (Iromoto 2015). He developed his practice outside 'formal education' (Mears 2013, 44) learning 'how to work with an environment' (Mears 2013, 33), a praxis defined by the problematic, real-life, complex, messy experience of living in close relationship to the environment and travelling within natural habitats and terrains. At its heart lies the idea that a close tie to the land is crucial because 'we depend on it': citing the early conservationist Grey Owl, Mears' principle is that 'we must remember that at the end, nature does not belong to us, we belong to it' (Iromoto 2015). Here, bushcraft is positioned as a radical pedagogy, Freire's conscientization, seeking to develop a critical awareness that can transform society's relationship with ecological systems: if ecology is the theory, bushcraft is the practice.

A system of apprenticeship with Mears gradually produced a cohort of bushcraft educators, some of whom went on to establish their own schools of bushcraft. Over time, these influences produced a distinctive community of practice, with a coherent pedagogy operating to shared principles, inflected differently according to individual interest and localities. Its key characteristics are skilled practice rooted in explicit ethical values, supporting an individually experienced connection with natural landscapes; practice as a personal transformative experience, arising from an intersubjective, triadic relationship between practitioner, craft engagement, and the material affordances in the landscape; and the idea of journeying through nature, an intention to travel through different ecologies which requires constant adaptability to them.

The relationship of bushcraft education to formal education

Like other radical pedagogies, bushcraft finds itself outside mainstream education but it does share educational process and philosophy with it. The technical-rational, essentially behaviourist approach requiring a specifiable type of performance to be mastered, with practice for its mastery, and little emphasis on underlying rationale that is the starting point for much formal education parallels that of bushcraft education. There are 'always and only' things to be learned as a matter of safety, such as knife-handling, or pragmatism, such as how to scrape birch-bark to make a fire. Like formal education, there is also a great deal of propositional knowledge to be learned, about flora, fauna, climate, and landscape. Distinctively, though, this learning arises out of an individual's personal need and takes place in the location where it will be immediately put to use. Thus, as with Ingold 's (2011) concern with traditional ecological knowledge, bushcraft knowledge is not inherited as a possession or legacy, but rather, it is 'made' in a 'continuous process of becoming' (Ingold 2011, 238) and a process of shared production 'between people and with the world'. As Lave and Wenger (1991) and Eraut (1994) highlight, this is a very material concern in the development of professional knowledge. In the creation of practical knowledge of the environment, then, 'much knowledge is knowledge that stands in stark contrast to the working knowledge produced by formal education' (Pálsson and Helgason 1998, 909).

In bushcraft education, and generally in the creation of practical knowledge of the environment, much knowledge is 'substantive', that is, while it may be complex it is also tacitly held, its acquisition relies more on performance than language (Ellen and Fischer 2013, 17). In Pálsson's influential study of how fishermen become 'enskilled', he remarks that the normative approach to learning entails a mental script that exists prior to and independent of human action (Pálsson 1994, 903). He finds this problematic, since 'the normative view...misconstrues the essence of the lived-in world, failing to capture what it means to engage in a skilful act, the "feel for the game" (Pálsson 1994, 903). This highlights the importance of the kind of knowledge which conveys 'the essence of the game from the point of view of the player' since, 'while rules and representations are relevant for the participant – the player – they are not what learning is all about'. Thus, Pálsson divides knowledge into knowledge that constitutes the rules of the game; knowledge required to follow the game; and the essence of the game from the point of view of the player. It is this 'essence' that is not accounted for in normative formal education.

Its absence reflects concerns in Puri (2013, 267) and Marchand (2010, 53) that, although studies of knowledge and its transmission between individuals, generations and cultures occupy a central and ongoing theme within social and cultural anthropology, 'most anthropological analysis falls short of explaining how knowing, learning and practice actually

occur, take place and continually transform with situated bodies and mind' (Puri 2013, 267). Their concerns echo Ingold's point that rules and representations 'are like the map of unfamiliar territory, which can be discarded once you have learned to attend to the features of the landscape and can place yourself in relation to them' (2000, 415). The aim, then, is relational: 'to learn the country, not the map' (Ingold and Kurttila 2000, 415) and learning needs to be adaptive and responsive and in terms of its occurrence to real-life contexts. It still reflects the structure of rules, information and a culturally transmitted stock of knowledge but extends that into the individual's embodied, contextual learning as an intersubjective knowledge accessible only by being in relationship with the other actor. Such knowledge only arises from forming relationships with people and places: this accounts for the 'essence' described by Pálsson, and constitutes learning which can only be gained through experience over time, knowledge as process, rather than knowledge as a thing to be known (1994). It equates to Pálsson's essence, meets Polyani's concern about how skilfulness occurs and exemplifies Ingold's concept of person and tool becoming porous to each other in an unbounded relationship in which people 'pour ourselves into them and assimilate them as parts of our own existence. We accept them existentially by dwelling in them' (Polanyi 1958, 59). It is the practical wisdom which Aristotle terms 'judgment' or 'prudence' and makes part of his system of virtue ethics, and contemporary commentators identify as an 'education of attention' (Gibson 1979, 254) or 'enskilment' (Ingold 2001; Ingold 2000; Ingold and Kurttila 2000; Pálsson 1991).

It is these qualities that encourage us to relate bushcraft education with the radical tradition, springing from Dewey's foregrounding of pedagogy as a directed development of the possibilities available in direct experience and exemplified by Neill's and Freire's philosophical positions. In particular, the focus on relationality which Neill describes in the context of Summerhill School correlates with the complex knowledges required by bushcraft education to form its purposeful relationship with the natural world. In turn, this resonates with the critical awareness that forms Freire's 'conscientization' and is fundamental to his praxis. Here, though, that relationality and critical awareness is extended to the natural world, for bushcraft education actively engages with its resources, leaving its mark on flora and fauna: the requirement is that such an engagement is not damagingly exploitative, for if it is, the literal ground on which bushcraft education is built will be destroyed. In these locations, therefore, Neill's distinction between 'freedom' and 'licence' take on a particular weight.

Ivan Illich's (1971) critique of mainstream education seems relevant here. His broad-brush concern was that mainstream education 'schooled' pupils into a passive, destructive,

consumerism, teaching them 'to confuse teaching with learning, grade advancement with education, a diploma with competence, and fluency with the ability to say something new' (Illich 1971, 1). His work tapped into 1970s concerns about global ecology's vulnerability, by making a parallel between an industrialisation, which 'poisons and exhausts the soil . . . pollutes the oceans and the atmosphere and degrades irreplaceable resources' (Illich 1971, 110) and a school system that frustrates, alienates, and degrades many of its pupils. It is an important polemical landmark in radical education, which by contrast evokes Mears's focus on learning how to work with an environment, to be able to rely on it for sustenance in order to travel safely, and to recognise that, as he puts it, 'nature does not belong to us, we belong to it'. ⁵

Bushcraft education, survivalism, and forest schools

Discussions of radical education tend to locate it as Other, understanding it more 'as an idea or an ideal than an actuality' (Goodsman 1992, 188). This means that key features of minority practice tend to get overlooked, or perhaps arouse hostility, and to be confused with other practices which hold a surface similarity. In seeking to delineate bushcraft education, therefore, it is important to make distinctions between its pedagogy and practice and that of two better-known movements: 'entertainment survivalism' and forest schools.

Survivalism has become a well-known through its foregrounding as television entertainment. In the UK, this is epitomised by Edward 'Bear' Grylls, whose shows locate either himself or other people in apparently hazardous natural landscapes, which they must 'survive'. In contrast to the bushcraft documentaries presented by Mears and Hiddins, for example, which sought to educate the public about knowledge required in order to live from the land – highlighting indigenous knowledge as centrally significant – entertainment survivalism shows focus more on sensationalism, fantasy, and amusement. As Doyle (2012) points out, this shades into apocalyptic fantasy, a kind of toxic masculinity which positions nature as a fearful, punitive force to be conquered. In contemporary bushcraft practice the natural world is sought as a place of inhabitation; in survivalism, nature is a hostile place which will overwhelm if it is not tamed. Such taming or conquest anticipates a return to civilisation or the re-establishment of a civilised space. In bushcraft, the natural world is always a 'civilised space' to those with the know-how to live there, rather than a hostile world to be feared. Both bushcraft and survivalism share self-reliance as a dominant theme, but where survivalism utilises 'self-reliance' to escape from nature and return to urbanisation, bushcraft utilises 'self-reliance' to retreat from urbanisation and live in a state of nature (at least for a while). The two ideologies meet, of course, in military survival

training but that is a quite different context from entertainment survivalism. Military survival training deals with real, not manufactured threats. It sets out to save lives from actual, unplanned danger, rather than courting survivalism's artificial 'peril-for-the-camera'.

Survivalism's keynote is fear of an overwhelming natural world, in direct contrast to bushcraft's understanding that nature is to be delighted in and understood in its own terms, through an intersubjective exploration of its values (Milton 2002). Pedagogically, survivalism is limited to an instructional environment which is only the starting point for bushcraft education. Consequently, while entertainment survivalism may appear to be cognate to bushcraft education, it can only ever be a 'part' of bushcraft's educational 'whole'. While bushcraft pedagogy may contain survival training, survival training can never contain the 'whole' of bushcraft education.

In a similar fashion to entertainment survivalism, bushcraft education may appear to share pedagogical principles and values with forest schools. Forest School has entered the lexicon of teachers' practice in outdoor education and learning outside the classroom in recent years (Prince 2019). It uses similar learning environments to bushcraft education but takes place mainly within mainstream formal education. While bushcraft education is rarely referred to in outdoor education literature, there has been a rapid growth of practice, literature and research on Forest School in the UK and Scandinavia.

The Forest School movement engages children in regular and repeated facilitated learning in the outdoors, usually a wooded area, using child-centred approaches (often for Early Years or pre-school children) for holistic outcomes, emphasising first-hand experiences and positioning participants as active and interactive learners (Knight 2013; Rea and Waite 2009; Williams-Siegredsen 2012). It has gained a reputation as educational practice that can mitigate concerns about the effects of children's diminishing relationship with the natural world (O'Brien 2009). Forest School ideology locates itself within a liberal educational tradition, using the natural environment to engage young people and to stimulate their curiosity and interest in learning. Forest School does not position itself as radical pedagogy: its purpose is not social change, although it might enhance nature 'connectedness' or children's relationship with nature (Smith, Dunhill and Scott 2018). It can be seen as an 'alternative' pedagogy (Waite and Goodenough 2018) depending on what is foregrounded and what is backgrounded. For example, does teaching in woodlands position them as a fun way of 'spicing up' lessons in geometry, or does it position geometry as useful in stopping your shelter falling down? Is the forest instrumentalised as a classroom or is it an

intersubjective location to be understood in its own right? Specifically, what is the relationship between the learner and their environment and how is that developed, supported, and expressed?

Forest School frequently uses activities such as whittling, carving or making fires, which are fundamental to bushcraft education and in that sense it relates to bushcraft as a hybridised practice, potentially forming a 'third space' between the culturally-sanctioned purposes of liberal education and the emancipatory social consciousness of bushcraft's radical pedagogy. Distinctively, though, bushcraft's aims are more extensive. To take wood-carving as an example, in bushcraft education woodcarvers first acquire knowledge and familiarity with fundamental safety and technique, but rapidly progress to understanding the behaviour of the wood in order to begin to predict its response to their actions. They have thus entered into a relationship with their tool and with the material they are shaping, so that rather than imposing their design upon the wood, they listen, feel, predict and look for the idiosyncrasies that the wood's grain reveals to them. This is the knowledge acquired from being in a relationship with something and it speaks to the deeper understandings of bushcraft as living and fluid and grounded in local traditional knowledge about woodcraft and naturalist study. Further, bushcraft education seeks to draw on knowledge from that embedded location to transform it into a knowledge and practice that is more universal and able to travel. Its pedagogy reflects what Braidotti (1994, 25) refers to as a 'nomadic consciousness' - utilising 'travelling knowledge' in which the practitioner accepts the fluid nature of their praxis as they move location and continually adapt to changing contexts, 'not taking any kind of identity as permanent' (Braidotti, 33). This level of autonomy and self-determination, in which the learner decides what, how, and when they will learn (as Summerhill's children do, for example) belongs to radical pedagogy. It foregrounds a freedom and community which is implied by, and has potential in, Forest School education, even if it is not often realised. Nevertheless, it may be these very qualities of individuality and relationality that constitute the relationship between childhood experiences with nature and children's physical and emotional health.

Conclusion

Seeking to locate a newly emergent pedagogy, such as bushcraft education, within the received educational canon is necessarily problematic: it is relatively unrecorded, relatively little experienced, and relatively unresearched. But at the same time it is distinctive and growing in popularity: in 2015 there 'were eighty-plus commercial schools in the UK' (Fenton 2016, 139). As well, the recent international 'school strike for climate crisis' united the spirit

of radical pedagogy with a concern for a fruitful relationship with the natural world, both key features of bushcraft pedagogy. The school strike's voluntarism, assertion of autonomy, political democracy, refusal of state regulation, and its intent to educate exemplify Freire's pedagogy of the oppressed. Its protestors seek to emancipate both themselves and their societies from the injustice of global catastrophe brought about by over-industrialisation and consumer commercialism. Its critical awareness of climate crisis has been formed by a personal conscientization which they share with their societies through dialogue initiated by protest, as a deliberate educational act. At the heart of it lies a question fundamental to bushcraft education: how best may we live symbiotically with our flora, fauna, and natural resources?

Education is lighting a fire, not filling a bucket, says the popular aphorism, evoking images of turning on a tap or striking a match. But neither of these activities are simple in bushcraft education. Ensuring a supply of clean water is an immediate preoccupation and achieving it is a skill in itself. And water may need to be boiled to make it fit to drink, making fire-lighting a co-dependent activity, not an either – or choice. Lighting a fire becomes an embodied example of bushcraft education rather than a metaphor, requiring both 'bush' and 'craft'. Using a bow-drill begins with knowing which trees yield appropriate wood for making a set of firesticks, being able to identify them in all seasons, knowing the habitats they prefer, and the landscapes where they are likely to occur. An appropriate tree must provide both dry wood and green wood for different components of the firestick set and each part has to be of the right hardness. A similar detailed knowledge is required to source and craft the cordage for the bow, and to collect the tinder that will take the ember, as well as firewood of different thicknesses and kinds. Each part of the firestick set has to be accurately crafted to the right shape and size and then an appropriate location for building the fire must be determined. All of these steps are crucial and success depends on a sophisticated experience and the willingness to make a knowledgeable relationship with the landscape. So, for example, one group of bushcraft students, working under a tarp because it was raining, could not make fire until they left the tarp and moved out into the rain. There, the water saturation in the air was lower, so that even though it was raining on them, they could get an ember and a fire (Fenton 2016).

Why go to all that trouble? The answer seems to be that lighting a literal fire in this way genuinely lights a metaphorical fire in the learner, providing a 'peak experience' of relationality and meaning, expressed as:

feelings of joy and elation, deep satisfaction and a feeling of connectedness to both the essence of mankind (often described as 'primal') and the natural world. That joyful feeling was commonly described as numinous, expressed in transformational terms such as 'magical', 'primal' and 'alchemical'. They felt connected or reconnected to the idea of an essential humanness . . . giving them a feeling of security, confidence, pride, self-reliance and freedom . . . a new, cathartic connection to the natural world, expressed as an expansion of their usual human relationships, to incorporate a subjective, living nature (Fenton 2016).

This is a far cry from the kind of experience that Loynes (1998) calls 'adventure in a bun', or the 'McDonaldisation' of outdoor experience. It is a richly relational, empathic, authentic and intimate experience of 'nature', includes experiential learning and aligns with 'place based pedagogy' or place-responsiveness and sensitivity in outdoor education (Humberstone, Prince and Henderson 2016; Wattchow and Brown 2011). Unlike the so-called 'Leave No Trace' movement, which uses complex gadgetry and sophisticated equipment as insulation from the natural world, bushcraft practitioners position themselves as part of what Ingold (2011, 63) calls 'the *meshwork* of entangled lines of life, growth and movement'. Their intention is to live with, not simply to spectate. It is a fundamentally ethical stance, drawing from Grey Owl and Mears' deontological position that 'we belong to nature, not nature to us' and Aristotelian virtue ethics, practical wisdom which is the source of 'eudamonia' or happiness and the 'arête' or honour arising from its practice. It follows the 'Consider Your Trace' discourse emanating from outdoor educators, the shift from education in and about the environment, to education concerned for and with the environment and the nurturing of environmental citizens (Loynes 2018, our emphasis). Bushcraft explicitly leaves traces of skilled intervention in its wake, as a necessary consequence of the deep knowledge and skilled craft that supports its symbiotic, intersubjective relationship with flora, fauna, and landscape.

Radical pedagogy recognises that 'debates about education always reveal the ideological tensions occurring in a society as it struggles to come to terms with changing cultural circumstances and new economic conditions' (Carr and Hartnett 1996, 25). In 2020, momentarily, pupils who participated in planned school climate strikes were categorised as threats to national security. The list was subsequently annulled and Extinction Rebellion's non-violent activism deleted from it. Nevertheless, it illustrated the way in which climate change, globally and in the UK, requires a new way of thinking, a new relationship with our ecology, and a new educational approach to support that. This vision of a 'good society' is necessarily emancipatory, focussing on 'the 'positive' freedom of all individuals to determine

those matters which affect their own lives' (Carr and Hartnett 1996, 28). If 'the primary aim of education is to prepare future citizens for membership of a democratic society' and society itself is changing rapidly, then the outstanding educational task is not to *defend* democracy by *reproducing* society, but to *create* democracy by *transforming* society. (Carr and Hartnett 1996, 199).

In the world of education, bushcraft offers a pedagogy which resonates with this transformative purpose. Operating as an inextricably intertwined ideology and practice, it seeks to articulate a set of values that arise from a deep, inter-subjective relationship with the natural world; to rediscover and reclaim the practices that enshrine those values; and to recognise the political discomforts and historical problematics associated with that and work with and within them. It acts as a radical refusal of alienating ideologies and discourses that emerge from the dominance of the Western cultures where it is situated. Thus, bushcraft is a personal transformative skilled relationship between practitioner and the natural world, which is arrived at through the development of understanding what the landscape affords to the human and also to the non-human. It is cognate to Haraway's (2016) 'tentacular' sensibility, the 'ability to think-with other beings, human or not' in what she terms the 'chthulucene', a 'timeplace for learning to stay with the trouble of living and dying in response-ability on a damaged earth' (Haraway, 2). In bushcraft education, this is done by developing the skill to undertake creative activity that provides self-reliance 'in nature', and outside the 'urban setting' and ethos: yet at the same time, the values it inscribes on the practitioner transfer to a domestic realm where, in de Certeau's (1984) formulation, they represents a 'tactic' for wider change.

This is a new project for (Outdoor) Education and one that has global significance. Future research might explore the role of bushcraft education in taking forward such discussions, by providing a position from which to interrogate the views of eco-psychologists, deep ecologists and social ecologists, who all argue that modern life has led to a greatly decreased self-nature overlap, and that this fundamental change in our relationship to nature explains, at least in part, our slow response to the current environmental crisis (Mayer and Frantz 2004). Bushcraft education offers a fruitful starting point for this kind of inquiry, opening up the landscape to a complex range of deep understandings, thinking-with rather than fighting against it. As a matter of course, it works with 'land that proceeds according to its own laws and principles, land whose habits – the growth of its trees, the movement of its creatures, the free descent of its streams through its rocks – are of its own devising and own execution' (Macfarlane 2007, 27). Its transdisciplinary practice may require climbing mountains or paddling white-water but that is a means to an end, not an end in itself. The

time it takes will be dictated by the landscape's affordances, not by a stopwatch, and its practitioners learn to be intimately aware not just of the rock or the water but the whole ecology, as they travel through it, as a part of its whole.

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¹ The devastating disease which settlers brought with them, whether unintentionally or as part of deliberate colonial violence is extensively documented. However, comparatively little attention tends to be paid to early settlers' dependence on First Nations support for their survival.