Home is Where the Heart is

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Abstract

This paper focuses on emergent findings from the *Meaningful Maps* project currently being trialled at Canterbury Christ Church University. Five hundred maps have been submitted by children of junior school age from around the UK showing places which they regard as significant in their locality. Surface level analysis sheds light on the range of features that they value and a variety of cartographic techniques that they employ. These responses can be seen as an early part of the process of constructing environmental meaning (Catling et al. 2010). However, the children's understanding of their home territory can also be interpreted using a framework of environmental literacy proposed by Stables (1998). Stables distinguished between 'functional literacy' which consists of core knowledge and 'cultural literacy' which comprises more intuitive, emotive and reflective aspects of knowing. It is argued that different kinds of knowledge – core, empathic and affective – combine in complex ways as children develop their 'sense of place' and that valuing children's first- hand immersion in the local surroundings is a vital part of facilitating creative and critical thinking. We see this as a key dimension of 'inclusive and equitable quality education' as proposed in SDG 4.

Key words
cultural knowledge, environmental literacy, maps, meaning-making, sense of place

Introduction

Meaningful Maps is an independent, ongoing research project that aims to explore children's knowledge of, and relationship with, place through analysis of their drawn maps and written descriptions of where they live. The project emphasises the communication of how, why and what places matter to children rather than just focusing on their cartographic skills, although this also features in the analysis. Endorsed by the Geographical Association and British Cartographic Society, and currently in its pilot phase, the project has received more than 500 maps from children aged 7-11 from across the UK. The geographical range is diverse, ranging from the Shetland Isles to Exmouth, and North Wales to Norfolk.

This paper frames the research to date with education for sustainability, especially SDG 4.7, firmly in mind. And we present the findings not just from a research perspective but also as a pedagogical framework that can be easily replicated in classroom situations. The idea that transformative learning experiences will ideally be 'experiential, inquiring, experimental, real world and action orientated' (Stirling 2009 p82) underpins our approach.

Why Meaningful Maps?

Children today have many less opportunities to explore their surroundings at first first-hand than they did in the past (Louv 2008, Vujakovic et al. 2018). This is significant because research has shown the value of rootedness (Tuan 1977) and the importance of direct experience in forming affective bonds with place that support the development of pro-environmental values (Catling et al. 2010). It is also argued that children's transactions with place have the potential to enhance their ability to engage with social and environmental problems (Jarvis et al. 2017). The rationale for this is that knowledge and sense of place are both precursors and prerequisites of critical thinking which requires skills of empathy as well as enquiry.

Children's local area maps offer a medium through which their environmental awareness can be explored and further understood. If children are to envision sustainable futures they need to have a knowledge of places and sense of agency and belonging. Even more importantly they need to care about their surroundings and be interested in places both locally and further afield. Robert Macfarlane (2017) summarised this neatly when he declared 'what we do not love we will not save'. Putting this argument the other way, if children have limited knowledge of their *own* home and local environment, and thus little opportunity to develop affective knowledge and explore *their* personal meaning-making therein, it seems reasonable to assume that attempts to understand how *others* perceive and value *their* place will lack a basic and necessary perspective. Empathic understanding of others' values without understanding your own, risks being tokenistic

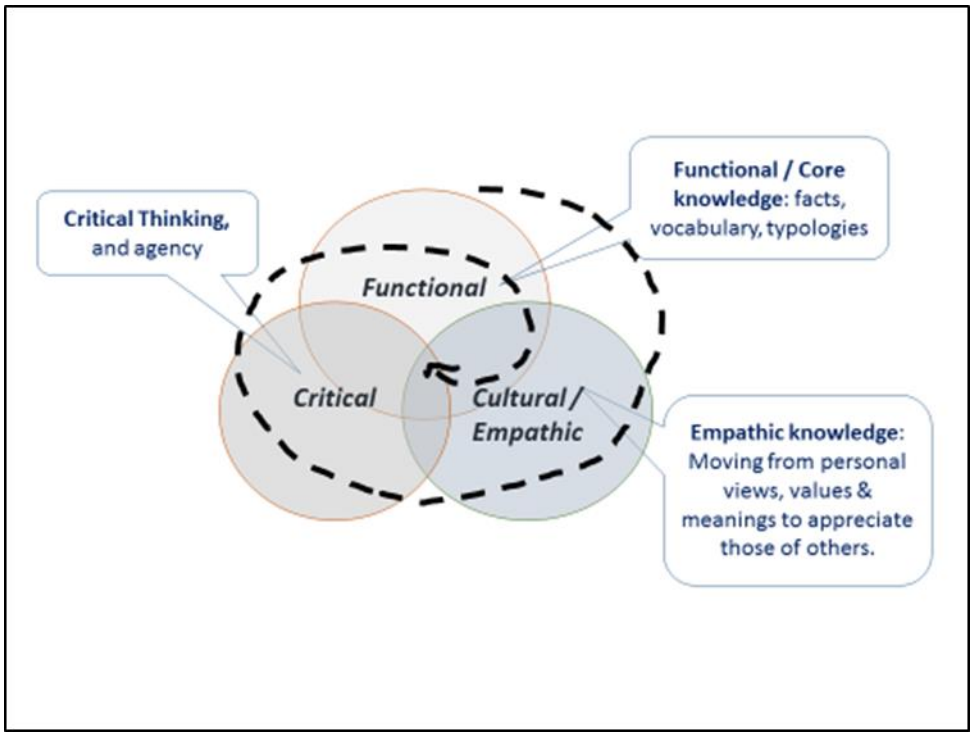
Methodology

In this pilot project, children were asked to think about their local area and about places that held meaning for them in either a positive or a negative sense. They were invited to communicate their ideas by drawing a mental map (see Lynch 1960, Downs and Stea 2005, Vujakovic 2016a, 2016b and Vujakovic et al. 2018), annotating it as much as they liked to convey addiitonal information about the places they had shown. It was stressed that the aim was not to create the neatest or best-looking representation but rather, one which reflected what they knew and felt about their local area. The children were also asked to provide a short written description saying why they had selected the places shown on their maps and why they were significant. The full instructions provided for teachers can be viewed on the *Meaningful Maps* website www.meaningfulmaps.org. A more detailed background to the project can be found in Vujakovic et al. (2018).

Theoretical background

We adopted a working framework to help us interpret children's responses from a sustainability perspective built around Stables' (1998) theory of environmental literacy. Stables argues that critical decision-making and action involves three components (a) functional knowledge (b) cultural knowledge (c) critical thinking and that these combine in a cyclical process (Figure 1). One of the key strengths of Stables' theory is that it represents learning in terms of meaning-making rather information-processing. It also highlights empathy, values and cultural understanding. If, as Biesta argues, the task of education is 'to arouse in pupils the desire to want to exist in the world in a grown-up way' (2017 p6) and to question whether what we want is beneficial 'for the life we live together on a vulnerable planet with limited capacity' (2015 p8), Stables theory suggests a way in which this task might be approached.

Figure 1: A model of critical environmental literacy (after Stables 1998)



Functional knowledge

Functional knowledge equates to core knowledge - the facts, names and vital vocabulary essential for place-related dialogue. It is often taken for granted that children need to know such basic, functional vocabulary and be able to use it in order to engage and talk about a particular subject, in this case 'place'. However, their vocabulary has to be consciously developed and nurtured as indicated by a study of more than 400 four- to eight-year-old children in a mix of English primary schools (Owens 2004). This revealed that children's environmental vocabulary grew at an impressive rate during the Reception Year when the curriculum focussed on outdoor learning but that their environmental language development halted when they embarked on the much more formal programme prescribed in the National Curriculum. Language matters. As Macfarlane (2016) points out, there is a sense in which place names operate as much more than referents and a danger that natural phenomena and environmental features become unseen if they are unnamed. Furthermore, as our ability to name particular aspects of places becomes depleted, so our capacity for understanding and imagining possible relationships with the non-human world becomes correspondingly eroded.

Cultural knowledge

Cultural and empathic knowledge relates to the understanding of cultural contexts, other people's views, perceptions and values. People can see, use and feel about places very differently and this palimpsest can be a rich landscape for collaboration or contention, depending on whether and how these different layers of meaning are perceived. Age related differences can be particularly revealing. For example, children often create and give names to their own personal geographies (Matthews 2002) that are often overlooked by adults (Pickering 2017). Matthews and Limb (1999)

argue that this has direct implications for decision-making and that it is a mistake not to recognise the cultural agency of childhood when engaged with environmental planning. Being aware of other people's viewpoints and their cultural positioning is an important part of a sustainability mindset. Asking difficult questions such as 'whose place' and 'who decides' draws attention to the power relations which lie behind environmental decision-making. The term '*empathic geographies'* coined by Lambert and Owens (2013) is one way of encapsulating the complexities that are involved.

Critical Thinking

Critical thinking is currently a popular and vaunted approach for education, championed as a 'core skill for the 21st century (Watson 2015) and a key part of the British Council's global Connecting Classrooms and Core Skills Programme. Stables (1998) argued that effective critical thinking occurred when both functional and cultural literacies were in place. In other words, we need some core knowledge to help decision-making and agency but we also need an empathic understanding of others' perspectives and the role of the emotive and affective dimensions of knowing. When we realise that there are other perspectives to be considered we also become more alert to fakery and deception.

Preliminary findings

This paper focuses on maps submitted by children in two contrasting schools – a village school in Elham in Kent and a town school in Bodnant in North Wales (n=112). The maps were all drawn in school under the guidance of a teacher. Although the teachers were not interviewed, they reported that children appeared to enjoy drawing the maps and that drawing a map of the local area by hand significantly enhanced children's understanding of digital/electronic maps of the same area. There is no attempt in this initial analysis to consider gender, ethnic or age-related differences nor to consider the impact of previous teaching.

Functional knowledge: natural and built features

As expected, all the children focused their maps on the built environment and they nearly all showed roads. The children's own house, friends/neighbours/relatives houses and their school were the most common features. Shops, playing fields and leisure facilities also featured prominently. Specific features ranging from brick walls to bridges were included on individual maps. One surprising finding was that churches were shown on less than 10% of the maps, even though a church was clearly visible from one of the schools in the sample. The number of maps showing natural features was relatively small and more or less matched the number that showed a friend's or neighbour's house. Trees, orchards and gardens attracted most attention but very few children depicted animals of any kind. Although half the maps in the sample came from children attending a school within a mile of an accessible sandy beach, less than 8% of all the maps showed or mentioned it. In terms of scale, the maps generally covered a small area focussing on the route from home to school. Some children just showed the plan of their house or bedroom.

Cultural knowledge: personal and empathic meaning – making

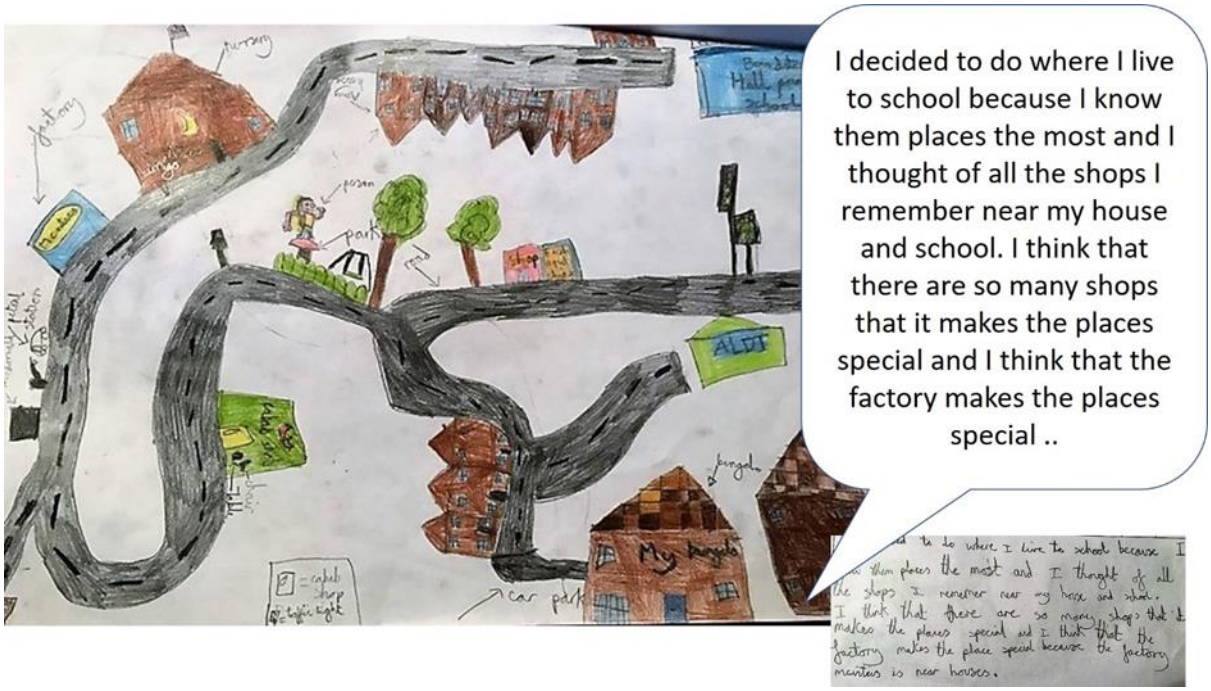
The maps were redolent with affective meanings about home and its surrounds. Children loved where they live, for a range of intrinsic meanings which were indicated by comments such as 'because I live there' or 'because my house is there' or because 'I know the area really well' (see map A). One child referred to potential for exploration as you can 'get a bit lost' and 'have an adventure'.

The desire to make meaning was also evident. Typical comments included 'that's where I hurt my knee' and 'that's where I learnt to ride my bike', giving significance to the ordinary and the everyday. Whilst personal meaning-making is an essential precursor of empathic thinking there was very little of decentring in this sample. However, some comments did hint at a regard for others and what they thought about the area; the importance of the biscuit factory, for example, might be due to parental work considerations, or the comment about the park due to its importance to someone's dog, 'It was his favourite place'. Overall the maps gives strength to a continuing notion of rootedness, belonging, identify and value and many children clearly welcomed the chance to celebrate their place.

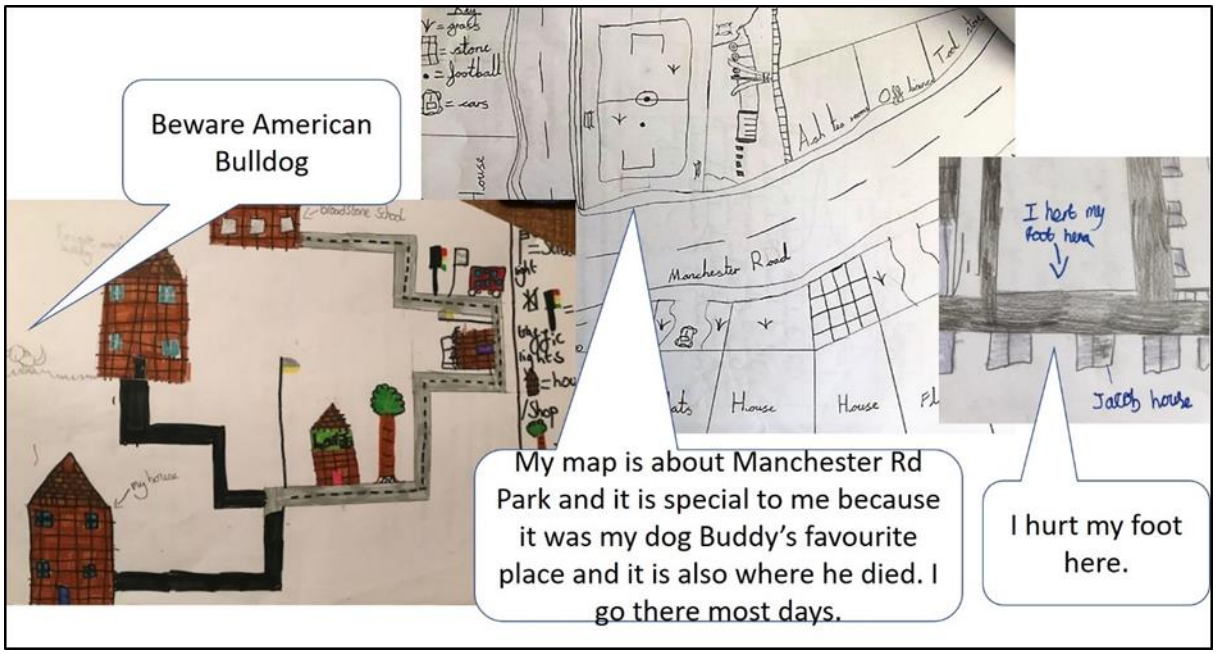
Evidence of Critical Thinking

There was little to indicate obvious critical thinking in the sample studied but as we had not asked for a critical perspective or decision-making about the local area this was not to be expected. Interestingly, one child had commented that there was a very busy road outside their house, with a slope that was 'too dangerous for us to play on'. The evidence of existing cognitive and affective knowledge does, however, suggest the potential for critical thinking to be developed.

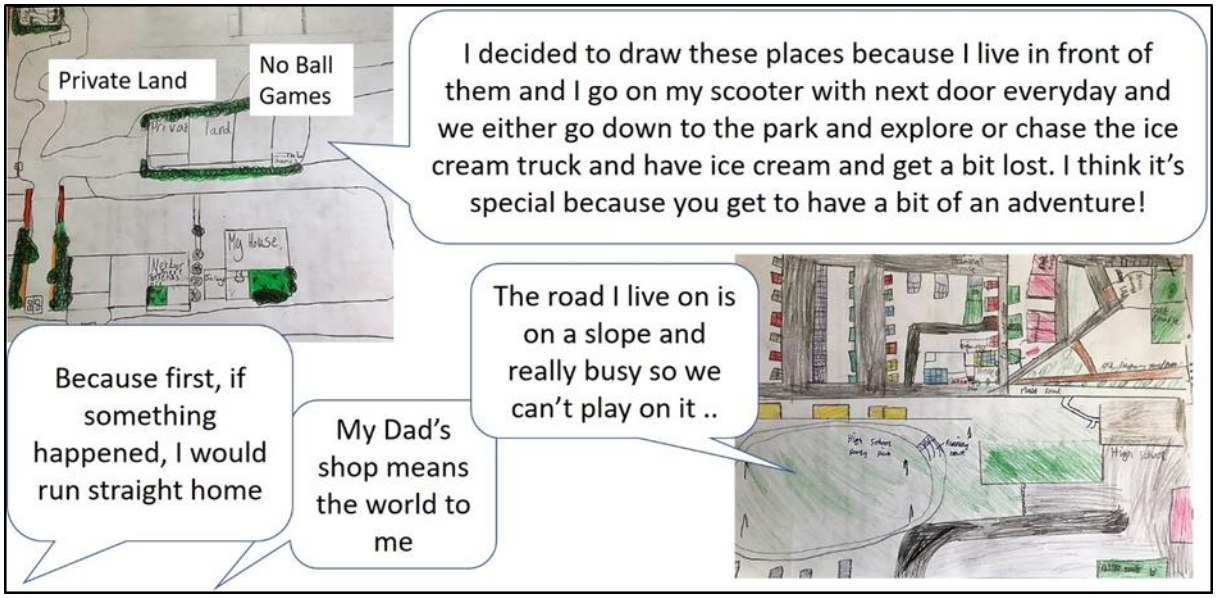
Map A: An example of a drawn map from a child, aged nine



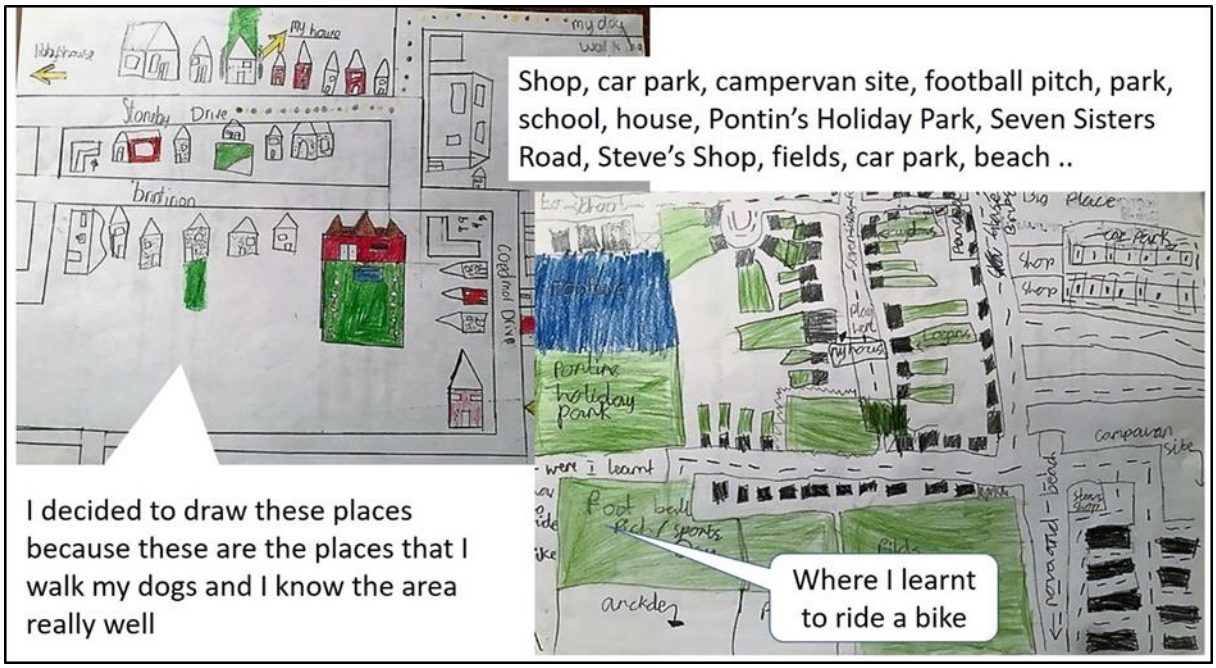
MAP B: Significant events on the map



Map C: Maps of adventure and constraint



Map D: Maps with names and knowledge



Conclusion

There are many unexpected directions and ideas that have emerged from our initial research and analysis. The fact that roads linking place(s) were the most prominent feature on the maps chimes with the notion of '*wayfaring'* which focuses on interconnected and enmeshed lines and the subsequent knots and interactions which give places significance (Ingold 2011). The way that the places drawn on the children's maps are overlaid with varied meanings is suggestive of liminal and malleable encounters, transitions and hotspots (Salvatore, S. & Venuleo 2017). It could also be indicative of environments in a state of 'becoming' (Mickelsson et al 2018). Some children described places as a refuge for, and from, the emotions. This hints at *'third space'* skills or what Pradhan (2016) calls the *new core competency*.

In conclusion, it seems children seem to have limited knowledge of their local environment and what they do know is generally contained within their immediate home environment or the home to school route. Their perspective is ego-centric and they prize the family, friends and teachers who populate their lives. They know, and favour, built features over natural ones and have powerful, intrinsic feelings of love toward their place. Their voice rings out clearly from the maps and descriptions: 'It's hard to explain, I just love it' says one child, 'I've lived here all my life' declares another. It seems that home really is where the heart is!

The emotional dimension of environmental learning and sense of agency matters. If children are to develop a sustainability mindset they need to care about their surroundings and schools need to develop what Sobel (2008 p97) calls an 'authentic curriculum' which taps into children's inner lives. It is significant that many children reported that making the maps was an enjoyable exercise. It gave them the opportunity to talk about places full of meaning to them that might sometimes be dismissed at school. Fieldwork, where it happens, may be selective and not always focused on the immediate locality of children's homes. Indeed, it is often tempting to choose somewhere grander

with more perceived importance. We contend that as a practical pedagogy for sustainability, the ordinary and the everyday home environment is a rich field of meaning from which to nurture and develop critical thinking and agency. The *Meaningful Maps* project is opening the door to a pedagogical approach that allows aspects of functional, empathic and critical environmental literacies to thrive and gives purpose to what Hicks (2014) calls hopeful and preferential futures. However, as Scoffham (2017) points out, if it is to be developed effectively teachers will need support in order to develop their 'capacity, capability and confidence' (p40) in this new way of working.

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