

'Meaningful Maps' and Perceptions of Place

Paula Owens, Stephen Scoffham, Peter Vujakovic

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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 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 Kent. In this paper we offer the findings from just two schools involved in the pilot.

Context

Children today have many less opportunities to explore their surroundings at first hand than they did in the past (Louv 2008, Vujakovic et al. 2018). A key report from the National Trust (Moss 2012) cites a range of factors which have contributed to restricting children's freedom. These include the danger from increasing volumes of traffic, parental fears of 'stranger danger', changes in social attitudes and the desire to achieve a 'zero-risk' world. Ironically, the urge to protect children has had unintended consequences. There is no evidence, for example, that children are actually safer in their bedrooms than they are outside. Indeed, social media and electronic communications are exposing them to new and uncharted risks which are every bit as serious as the ones that went before. At the same time, children are being deprived of the multiple benefits that arise from being out of doors.

Direct engagement with place is important for children's physical, psychological and social development. Research indicates that it helps create affective bonds with place (Tuan 1977 calls this 'rootedness') and supports the development of pro-environmental values (Catling et al. 2010). Activities in the local environment serve to build children's physical skills and are important for their sense of well-being (Gill 2012). 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. It can also contribute to education for sustainable development (Avriel-Avni, 2010). 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 (2018) summarised this neatly when he declared on twitter 'what we do not love we will not save, and that we rarely love what we cannot name'. 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 study, 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), and invited to annotate it to convey additional 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 than information-processing. It also highlights empathy, values and cultural understanding. If, as Biesta (2017) argues, the task of education is 'to arouse in pupils the desire to want to exist in the world in a grown-up way' (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.

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 their understanding of digital/electronic maps of the same area. In analysing our findings we focussed on two aspects of environmental literacy (a) functional knowledge and (b) cultural knowledge. There was little evidence of critical thinking in our sample, but then our research questions had not sought to elicit this. 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

All the children focused their maps on the built environment and roads were particularly prominent. The most common features shown on the maps were the children's own house, friends/neighbours/relatives houses, and their school. Many of the maps also included shops, playing fields and leisure facilities. Specific features that were shown on individual maps ranged from brick walls to bridges. One surprising finding was that churches were shown on less than 10% of the maps. Churches are distinctive physical and social landmarks and a church tower was clearly visible from one of the sample schools. Another finding was that the total 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.

The lack of natural features drawn by this age group (nine and ten-year-olds) echoed findings from a study by Owens (2005) in which more than 400 primary children drew and talked about their environment over the course of a year: although the number of 'natural features' drawn by the children grew over a year in Reception settings, in all three schools researched, there was a decline

of natural features drawn, when compared to this benchmark, in year-groups one and two. As Table 1 shows, in this stage of the Meaningful Maps pilot study, the overall number of features drawn on maps accounted for about a fifth of the overall features drawn relating to the built environment.

Trees, orchards and gardens attracted most attention in these maps but very few children depicted animals of any kind apart from pets. 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 (Table 1).

Built Environment	Number	Natural Environment	Number
Own house	66	Landscape features	35
Friends/neighbour's house	33	Pets	5
Parks and fields	33	Wildlife	4
School	31		
Shops	24		
Leisure facilities	17		
Car parks	14		
Paths and alleyways	10		
Total	228	Total	44

Table 1 Features drawn on children's maps (n = 112) relating to the built and natural environment.

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 and providing evidence of the cognitive and affective working together as Scoffham (2010) notes, to deepen learning and memory. Much can be learnt about places in the classroom but real-life experiences such as evidenced by these children through their maps are what contextualise them and help to deepen understanding of place (Owens 2017). The maps help to bring alive children's place interactions, as a dialogic frame of reference that can be explored back in class.

Whilst personal meaning-making is an essential precursor of empathic thinking there was very little evidence of decentering 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, whilst the park was valued for dog walking, '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.

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. & 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, the children in this study seemed 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. To quote an old adage, it appears that home really is where the heart is!

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