

Palimpsest of place: An exploration of an alternative place pedagogy in key stage 3 Geography

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ABSTRACT

This study explores an alternative place pedagogy in key stage 3 Geography based on work with a Year 9 secondary class of 13-14 year old students in an East Anglian mixed comprehensive school. The conceptual and pedagogical approach draws from the academic understanding of place developed through the work of Doreen Massey (1994, 2005a, 2014) alongside the pedagogical work of Australian educationalist Margaret Somerville (2010, 2013a, 2015) and her work with Aboriginal and Torres Strait Islander communities. This thesis's pedagogy is particularly influenced by Somerville's (2010) trilogy of learning about place through the body, stories and other representations and in this western context local issues. It was additionally influenced by the work of Gruenewald (2003a) and North American place-based educators. Woven together, these approaches provide the platform for developing an approach for educating young people to know and care for local places which are part of a global world.

To introduce this pedagogical approach required the students to experience a place using their senses. This was supported through geography fieldwork that enabled them to walk and explore a place in groups. This place pedagogy involved students contributing to the design of their investigations and in the process becoming reflective, active and engaged learners in taking photographs and making sensory recordings. Each activity formed a layer of a complex palimpsest, building on earlier understanding to develop students' geographical place knowledge. During follow-up activities the students produced multi-modal presentations to express their sense of place and in the process developed their ability to use geography's vocabulary and grammar (Lambert, 2011, 2017) to think geographically (Jackson, 2006). The analysis of these representations was informed by the multimodal work of Kress (2010, 2014). As the research outlined in the thesis demonstrates, this pedagogy extends ways of engaging students in the study of place.

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List of Abbreviations

DfE	Department for Education
GA	Geographical Association
GNC	Geography National Curriculum
UNCRC	United Convention on the Rights of the Child

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Chapter 1

Introduction

1.1 Introduction

This study explores a sensory pedagogy of place in the English secondary geography curriculum. The research is situated within, and contributes to, the continuing discussion of the meaning of place (Cresswell, 2015).

The research reported here is set within the context of changing government policies and practices such as the desire outlined in the guidelines for the key stage 3 Geography National Curriculum (GNC) to inspire a curiosity in young people that will stay with them throughout their lives (DfE, 2013). Rawling (2018) has identified that “place is one of the biggest challenges for secondary education” (p.58). However, she recognised (Rawling, 2018) that place in schools has been moving away from academic geography since the 1970s following a more thematic spatial approach rather than concentrating on specific places. The most recent Geography National Curriculum (GNC) (DfE, 2013), however, provides scope for a different way in which it could be represented but the stress is on the teacher to explore these avenues (Rawling, 2018). This research aims to focus on exploring an alternative approach to the study of place in secondary geography, one that supports such an investigation.

Place has been identified as one of the three key concepts within Geography by Cresswell (2015) who then stated he considered it to be the most significant “Geography is about place and places” (Cresswell, 2015, p.1). The far-reaching importance of the concept is reiterated in geographical education by Lambert (2017) who similarly selected it to be one of the subject’s top three conceptual ideas, along with the environment and space.

An initial understanding of the concept will be introduced here, with the view to further discussing and examining its meaning in the following chapters. “This is the most straightforward and common definition of place – a meaningful location” (Cresswell, 2015, p.12). Here the study of a place conjures up an image of a tangible location. However, the description of the concept proves to be a more intangible activity. This challenge is recognised by Massey and Thrift (2003) who appreciated geographers’ dilemma about what they are expected to know about place. In this study, place is being examined as part of a geographical investigation, so reference to its spatial situation is

most apt. At the same time the word 'meaningful' does imply every place has its own configuration of phenomena, creating a unique location.

The following sections provide an insight into the development of this study. Section 1.1 introduces the research. Section 1.2 considers how policy changes have impacted on the study of place, while section 1.3 contextualises the study of place in key stage 3 geography. Section 1.4 considers why a sensory place pedagogy is important now while section 1.5 outlines the motivation for the research and 1.6 provides a summary of each chapter.

1.2 The impact of policy changes in the study of place

The report of the A Level Advisory Board (ALCAB) which informed the new A/AS level Geography specifications, was mindful that its content should sit within a framework of geography teaching which would progress from age 11 to 19 (ALCAB, 2014). From this perspective its identification of aspects of the concept that needed further development were most interesting and included areas where it felt there was a mismatch between school and university geography: "[T]he panel considered in particular concepts such as representation, meaning and identity are important to parts of human geography in higher education but which have limited expression at A level" (ALCAB, 2014, p.6).

There is evident scope to ensure representation is considered in relation to data and provides a reason to explore different means of expression. The significance of the comments made by ALCAB have implications not only for the study of place but also for the students' exploration of their growing awareness of their own identities in relation to these concepts, especially place. Interestingly the suggested content included input from higher education which came at a time when Rawling (2018) noticed school geography had moved further away from innovations in academia. The implementation of the National Curriculum (DfE, 2013) was identified by Rawling (2018) as a crossroads, from which school geography had not moved forwards, especially in its teaching of place. At the same time, there was no input from academic institutions into the reform of key stages 1 to 3, where Rawling (2018) noted a continued emphasis on locational knowledge. Consequently, the suggestions made by ALCAB, have relevance for key stage 3 Geography, which for many students is their last point of contact with the subject.

The emphasis on fieldwork and place in Human Geography provides a medium for investigating, observing, representing and understanding contextual information. All of

which could provide a different lens for examining local places and take place investigations beyond the limited use of traffic surveys (Cresswell, 2008).

The suggestions provided within the ALCAB Geography report (2014) relates to how to study and represent place extended to examining how it is portrayed which included the use of a variety of mediums. These modes have potential for use with students across the age range and included the use of poetry, filming, photography and digital technology (ALCAB, 2014). These could provide interactive means for engaging students in the study of a place: “[P]laces can have multiple meanings and identities, reflecting different perceptions and perspectives” (ALCAB, 2014, p.22).

The whole process of creating a breadth of unknown data could ensure students can be actively involved in interpreting what is happening in a place, not only at the point of data collection but throughout the process of its interpretation, analysis and representation. This means the students have an opportunity to be actively involved in creating meaning and understanding about a place, with the potential for them to develop their own interpretations which may vary from those of their neighbours.

The points that are relevant to this study relate to ALCAB’s (2014) recommendations for the teaching of place, where all students will live out the rest of their lives. Furthermore, if the study of place is part of progressive incremental curriculum development, meaning the ALCAB (2014) comments relating to the representation of findings could be introduced into key stage 3, to pave the way for their independent use at key stage 5. This would contribute to student progression, which Hopkin (2013) felt is not being consistently met. It has implications for stimulating key stage 3 geography students to explore different ways of expressing and representing their place experiences. Rawling (2018) felt the current GNC does offer an opportunity for investigating a variety of mediums for expressing place findings, and this avenue needs to be realised.

1.3 Contextualising the study of place in Key Stage 3 Geography

The current Geography National Curriculum is the fifth at key stage 3 since its inception in 1991, following the 2010 election of a coalition government (Hopkin, 2013). Place occurs under the heading of “**Place knowledge**” (DfE, 2013, p.2, bold in the original) followed by reference to factual content: “understand geographical similarities, differences and links between places through the study of human and physical geography of a region within Africa, and of a region within Asia” (DfE, 2013, p.2). The traditional nature of the content

of the Geography national curriculum was noted by Rawling (2018) who thought it could lead to descriptive geographical comparisons. The Geographical Association (GA, 2012) has particularly noted that learning facts does not stimulate conceptual understanding. At the same time there appears to be limited scope for developing any feelings for a place or even a sense of place which formed a key part of the GA's 2012 national curriculum proposals.

There is potential to enliven the GNC through applying the Geographical Association's (2012) 'thinking geographically' which is a core part of the GA's ethos in using concepts as a framework to shape geographical knowledge. However, there is limited opportunity within the GNC for relational thinking which Jackson (2006) envisaged supports geography's way of encountering the world, its issues and interconnections between places. This leaves the teacher to explore other avenues for creatively engaging young people with the teaching of place. To achieve this Lambert and Hopkin (2014) acknowledged would take a degree of pedagogic understanding, subject knowledge and ability to create a curriculum to support pupil learning. Furthermore, the recommendation to participate in fieldwork provides a way of allowing the pupils to follow an experiential route of enquiry to deepen their understanding of a place.

Fieldwork could provide an inroad into a more imaginative approach. It is well established within the discipline and has been recognised as a core part of children's learning in geography (Monk, 2016). This could provide a route for creatively developing the teaching of place, especially as fieldwork is mentioned separately within the programme of study. However, the following guidelines for its application do not instantly spark creative thinking: "use fieldwork in contrasting locations to collect, analyse and draw conclusions from geographical data, using multiple sources of increasingly complex information" (DfE, 2013, p.3). These recommendations appear to be reminiscent of spatial influences which Cresswell (2015) recognised were prevalent in the discipline during the 1970s. Their objectivity is diametrically opposite humanistic geography which emerged in response to this conception of rational beings and introduced the idea of developing experiential place encounters (Tuan, 1975, Relph, 1976). The traditional nature of the suggestions for communicating fieldwork give little indication of a sense of being-in-place: "communicate geographical information in a variety of ways, including through maps, numerical and quantitative skills and writing in length" (DfE, 2013, p.1).

This suggests there is room for negotiation if the Geography ALCAB (2014) aim for the new A level recommendations to be an integral part of a progressive geographical education from age 11 to 19 is to be realised. There is scope for Lambert's (2017) view that initiating young people in geographical thinking requires a degree of resourcefulness on the teacher's behalf. All of which is happening at a time when Rawling (2018) recognised school geography has lost touch with innovative academic thinking, especially in relation to the teaching of place.

1.4 Why a sensory place pedagogy is important now

Place has been established as a leading area of geography at both the academic and school level (Rawling, 2018) and a part of young people's everyday lives (Cresswell, 2008). The Geographical Association (2012) made a clear case for the ability of a geographical education to prepare young people to think geographically and be able to apply key concepts to their everyday lives. However, this provided a theoretical view of the world, one that may not engage all young people or provide an opportunity for them to be able to contribute to a discussion about their future worlds. This study through developing an experiential as well as a conceptual route provides an alternative way of engaging young people in their study of place.

As the Geographical Association (2009) states, the pathway to thinking geographically provides young people with the vocabulary and grammar in the form of key concepts like place, to convey meaning. However there has been growing awareness of the complex and abstract nature of the concept, place, that has made it difficult for students to comprehend (Cresswell, 2008, Rawling, 2011, 2015). This led Cresswell (2008) to urge for a more philosophical approach one that would delve below the surface and engage with the meaning of place. He felt that achieving an understanding of the concept would provide young people with a greater awareness of social issues facing places. To this could be added its potential to increase students' appreciation of places and provide an awareness of environmental issues they are facing. The question of how to stimulate such an interest and reflection will require as Lambert (2017) suggested, resourcefulness: "[T]o introduce the world to children as an object of geographical thought requires pedagogic ingenuity, for disciplinary knowledge may otherwise remain unconnected and 'inert'" (Lambert, 2017, p.20).

Here Lambert (2017) expanded upon the need for a different way of engaging with the current knowledge rich GNC (Rawling, 2018). There is scope to integrate all these approaches in the Geographical Association's suggestion for the teaching of place: "explore people's aesthetic, emotional, cultural and spiritual connections with places; the role of places in their own feelings of identity, sense of place and belonging; and the ways they experience and use places." (GA, 2012, p.3). The Geographical Association's wider remit offers all participants, the students, class teacher and researcher, the opportunity to develop a different relationship with place.

The time is right to explore different ways of engaging young people with the concept. One of the inroads to achieve a different place relationship, is as Rawling (2011) suggested the use of literature including environmental poetry to enrich the subject. "In fact, there may be a perception that geography is best dealing with the harder edged science of the environment and we should leave the softer imaginative and creative explorations to literature and the arts. In my view this would be a mistake." (Rawling, 2011, p.73). Here Rawling (2011) suggests a way of interacting differently with place, one that could lay the foundation for creating an alternative place relationship. The route and reality to achieving this for students could occur as Rawling (2011) suggested if they became poets and wrote about their own experiences of being in place. She questioned why geography should leave using their senses to engage with the environment to other subjects (Rawling, 2011). This line of thinking suggests a sensory place connection could add to providing a more rounded geographical education one that has the potential to engage students and leave them with a different place relationship.

In drawing on the work of Gifford (1999), Rawling (2011) developed her argument for introducing a 'post-pastoral' connection to nature, that could allow for an awareness of our being part of a world at risk. A post-pastoral view is perceived through the work of Gifford (1999) to include a deep sense of appreciation that comes from knowing something or somewhere in this instance a place more deeply. This thinking followed Gifford's (1999) argument that through developing a deeper environmental connection it could lead to an emerging sense of care for nature. This level of connection could be missed if geographical education concentrates on studying environmental issues alone (Gifford, 1999 cited in Rawling, 2011). Conversely, unless such a connection is made it is unlikely that young people would want to care for something for which they have no relationship (Rawling, 2011). However strong this argument may appear the reformed

GNC does not encourage this line of thinking with no mention of sustainable development. To incorporate Gifford's thinking would take Rawling's (2016) view of the current GNC that within its coverage there is scope for "professional development and expansion" (p.9) to broaden its interpretation.

Fieldwork with its opportunity to be outside offers a route for a more experiential place connection, where sensory place experiences can be explored. This is evident in Pocock's (1989) awareness of how our sentient beings are moved by sounds which do not happen in isolation. This suggests that using our senses to connect with a place, could bring it alive and hone our analytical skills to examine what is happening, why and with what consequences.

The link between the arts and geography was recognised by Meinig (1983) who declared it was not possible to become an artist through 'imitation' and instead suggested geographers share their personal feelings, possibly through contributing to literature. Indeed, he suggested art could provide a way of developing deeper place meaning (Meinig, 1983). While Darby (1962) recognised for some geographers, words may not be the most appropriate genre to convey visual place impressions. Consequently, he felt such descriptions left the reader knowing more about the writer than the landscape (Darby, 1962). However, he suggested the use of photography and in the process recognised that we all perceive different aspects of our surroundings (Darby, 1962). This left one wondering whether students could be supported to find different ways of recording and deliberating about aspects of places that interest them. Such an approach could provide the means of engaging students in a study of a place. While Darby (1962) recognised extending the means of representation beyond words has the potential to convey an aesthetic appreciation of a landscape. A landscape is interpreted as encompassing a larger area than a place, one that extends to the horizon (Darby, 1962)). This could lead to subsequent reflection over different spatial configurations. The route to creating these deeper place connections could be through our senses. This is echoed in Thrift's (2015) comments that scientific thinking alone cannot convey a sense of wonder or express a complete insight into our place world.

This line of thinking is complementary to Massey's (2005a, 2014) argument for a relational view of place that acknowledged its part in a wider world where local actions have global repercussions. Here Massey (2014) argued that an understanding of the

implications of our actions in local places could increase a sense of wonder for our global planet earth. However, for this connection to be made it would take conceptual understanding. This knowledge could increase young people's awareness of their present and future role in looking after our local and global place.

The time is felt to be appropriate for a sensory approach which could provide a stepping stone between the reformed GNC and the GA's (2009) manifesto. At the same time, it could help to address the mismatch identified by Rawling (2018) between the exciting place work happening in tertiary education compared with the study of place in secondary education. There is an evident lacuna at this juncture which Rawling (2018) felt was reinforced in the current 2013 key stage 3 GNC (DfE, 2013) which appeared to return to the descriptive approach of the first national curriculum in 1991. This led Rawling (2018) to "argue that place is one of the biggest challenges for school geography" (Rawling, 2018, p.58). In this study I am arguing for a sensory place-based pedagogy to encourage young people to personally engage with the study of a local place and subsequently explore different ways of representing their findings. However how a more creative approach will be embraced and developed after researching alternative ways of engaging with the study and pedagogy of place.

1.5 Motivation for the research

Throughout my working life as a geography teacher, I have always been fascinated by the evolving nature of the subject and how it has changed over the years. This interest was stimulated by studying for an MA in Geography and Education at The Institute of Education from 1985-7, which increased my understanding of the reasons for these changes, through the evolving ascendancy of different paradigms within the discipline. It was a time of significant change within school geography, with growing criticism of scientific thinking and increasing popularity of the 16-19 Geography approach (Rawling, 2018). However, the influence of models and the search for theoretical order never seemed to disappear from the curriculum or geography departments I where I taught. At the same time there was the never-ending question of how to motivate and engage pupils, which often involved drawing on geography's visual tradition, with annotated sketch maps, diagrams, concept mapping and the use of fieldwork. These interests led to becoming involved in the inception of using Landsat imagery in the geography classroom, with pupils enjoying the addition of another brightly coloured visual medium to consult

along with Ordnance Survey maps and atlases. The findings of these exploratory investigations led to being part of the Geographical Association's working party on satellite images and contributing to *Spaceview UK* (GA, 1988).

Towards the end of my classroom teaching career I fulfilled a lifetime's ambition of becoming a full-time university student and enrolled to study Agriculture and Rural Development at The University of East Anglia. This seemed a natural step from having grown up on a farm where training leading to a job with a pension was considered to be of paramount importance, rather than studying at a university, which was deemed to be inappropriate. My original higher education experience was a four year B.Ed. course, which involved teaching placements and left me with a continual conundrum of what and how to teach different aspects of geography, to ensure the pupils were fully engaged. At the same time, I have had the privilege of having taught in a variety of secondary schools including a sixth form college, a grammar school, independent schools and mainly comprehensives, which has given me a wealth of insights into how colleagues have tackled the same dilemma.

While early in my career I worked for an insightful Head of Department, who felt the only way to understand how to prepare pupils for examinations was to become an examiner. With this end in mind I was encouraged to mark papers at different levels, besides assessing coursework, which again broadened my awareness of different approaches. However, it gave me confidence to encourage students to use their own resourcefulness to develop creative ways in which they portrayed their fieldwork.

While I was expecting my daughter, I studied for an Advanced Diploma in Geography Education at Homerton College, with the investigation focusing on how Years 5 and 6 pupils developed their conceptual understanding, to create a geographical dictionary. It was an exploratory process, one which involved the pupils in using images and text, based around exemplar material from fieldwork to a local town. Without realising it at the time, it demonstrated the value of multimodality in developing conceptual understanding.

I have always been fascinated by places, and their different characteristics, so having decided to embark on a PhD, when I read the guidelines for the new A level Geography, I was drawn to the section on the teaching of place. This led to reading the work of Somerville which suggested a different way of engaging young people in their study of place, while at the same time preparing them to become creative and responsible

twenty-first century citizens. I was drawn to her writing having listened to my grandfather talking about Australia, where he worked on a mixed farm and enthused about the country and the people. He always claimed he would not have returned home if he hadn't ended up in northern France at the end of the First World War, having fought for the ANZACs. There were subsequent visits from Australians he had met, which further stimulated my interest in the country. This interest in other places was further inspired by my Scottish paternal grandparents, who never forgot their Scottish cultural heritage. Furthermore, I have tried to share my interest in places with pupils I have taught and have organised numerous field courses to a variety of locations, all of which involved preliminary visits and research. Wherever possible the visit would involve pupils in meeting local people and visiting industries, which have included coastal engineers, industrialists, planners and farmers to bring the place alive for the pupils. Besides involving the students in sketching, measuring and photographing, it would always include walking and exploring the place. I was interested to see how well they connected with real live examples and was impressed with their creativity in representing their findings. Consequently, studying for a PhD in the teaching of place has been a natural progression from a lifetime teaching geography.

1.6 Summary of each chapter

The first chapter has acted as an introduction, setting the scene for the research and positioning my work within the teaching of place in secondary geography. The subject has undergone a period of change, with place figuring highly as a key concept in each key stage. At the same time there is a recognition of place as a complex abstract concept, one that students have struggled to understand in current geography teaching (Cresswell, 2008, Hopkin, 2013, Rawling, 2018). This suggests there is a need for a different way of engaging young people with their study of place, especially with growing concern about environmental issues facing our world (Rawling, 2014). The research proposed that this is an appropriate time to explore different ways of engaging young people in their study of place and suggests investigating a sensory place investigation.

In chapter two, there is a literature review which examines relevant publications relating to the study of place in key stage 3 Geography. These include an examination of The Geographical Association's (2009) manifesto, *A different view*, and used Frances Slater's (1992) writing to consider how it may be possible to travel with a different view. This

leads to an examination of literature of how place is currently being taught in key stage 3 geography with a recognition of identified gaps in its teaching. The potential of fieldwork, a statutory requirement of the Geography national curriculum (GNC) is considered in relation to the teaching of place. These findings led to exploring alternative ways of engaging with the study of place as demonstrated by the earlier work of Somerville (1999, 2007a, 2010). This is followed by considering the North American combination of critical place pedagogy and place-based education. Here Somerville recognised the means of critically engaging young people with their study of a place. The literature review identified areas for further research in the teaching of place.

Chapter 3 outlines the theoretical conceptual framework which has been developed to guide the research. This has evolved after taking the research into school, where it grew to embrace multimodality as a means of analysing how the students' represented their fieldwork findings. The thinking shaping the study of place was particularly guided by Massey's study of place and Somerville's alternative place pedagogy. The later evolved in a different context yet has provided a route to develop the affective domain through her work with Aboriginal and Torres Strait Islanders, with their deeper place relationships. The research questions guiding this research are discussed at the end of the chapter.

In chapter 4, there is an outline of the methodology which has been used to shape the data collection and analysis. The investigation is a case study, which has influenced the ways in which the study has been conducted. The question of how to represent information has been evident throughout the study and has led the research to investigate the potential of multimodality to interpret how the students have expressed their place findings.

The following chapters, 5 to 7, include the findings and analysis of the students' work which they produced while taking part in the research. The first, examined the pedagogy adopted and how it influenced the students' study of place. This included an analysis of the incremental planning, implementation and communication of their findings from adopting this alternative place pedagogy. Chapter 6, considered how the students represented their findings. Here there is an emphasis on the analysis of the representation of a selection of the students' posters and a group video. These were insightful in terms of what and how the students engaged with the place. This process was informed through the guidance of multimodality in interpreting the students'

representations of their sensory place experiences. Chapter 7 examined the place knowledge the students developed from the layers of ways in which they had engaged with their study of place. These were expressed through a variety of modes including the writing of poems, postcards, annotated maps and included group presentations.

The final chapter, 8, provides a discussion of the overall findings of the investigation of a different way of teaching place. The emerging messages relate to the unfolding of a geographical palimpsest which has embraced temporal ways of engaging with the study of a place. While at the same time there is growing awareness of how 'being-in-place' as embodied sentient beings led to the students creating a variety of follow-up activities, partly reflected by their individual interests. The palimpsest was incremental in a number of ways including how the students developed their place understanding. The chapter includes suggestions of how the research can be taken forwards as well as reflective conclusions which have emerged from the research.

Chapter 2

Literature Review

2.1 Introduction

In this chapter I will explore the current coverage of the teaching of place in key stage 3 geography and examine critiques of this approach. Place is identified by Cresswell (2015) as one of geography's three main concepts, noting that "Geography is about place and places" (Cresswell, 2015, p.1). Jones and Lambert (2018, p.11) also recognised that place is one of the discipline's "big ideas" or "meta-concepts" (Jones and Lambert, 2008, p.11). These comments have set the scene for searching for alternative suggestions of how to engage with the teaching of place. Place is where we engage with our surroundings and encounter the world (Cresswell, 2015). Consequently, the way in which we teach place, has implications for how we live in place. This literature review is carried out bearing this in mind.

The concept of place sits within the framework of the current key stage 3 geography programmes of study, the inception of which was influenced by the 2010 Schools White Paper, *The Importance of Teaching*. This followed concerns that schools were falling behind the rates of improvements in other countries (DfE, 2010). One way of tackling this was perceived to be by "reducing prescription and allowing schools to decide how to teach" (DfE, 2010, p.10) with a stronger emphasis given to content which Lambert (2011) referred to as a 'knowledge turn'. Consequently, it aimed to offer teachers the chance to have a role in planning how the subject matter should be delivered. "[W]e propose to take a new approach to the curriculum, which affirms the importance of teaching and creates scope for teachers to inspire" (DfE, 2010, p.40). Taken from this perspective the current key stage 3 programme of study has scope for teachers to be innovative.

The chapter is structured in two broad sections. Firstly, sections 2.1 to 2.4 examine a selection of literature concerning the teaching of place in key stage 3 geography including the study of place through fieldwork, with identified gaps or critiques of existing approaches. The second part, 2.5 and 2.6 explore alternative ways of engaging with the study of a place through the pedagogy of the Australian educator and researcher Margaret Somerville and the North American place-based education movement centred around the work of David Gruenewald. Here, it examines existing approaches to the

implementation of such a pedagogy, establishing the trajectory of the research reported in the dissertation.

2.2 Perceptions of the teaching of place in key stage 3 Geography

This section aims to consider the debate relating to how place is presented in key stage 3 geography. The introduction of the national curriculum followed the 1988 Education Act which marked the end of teachers' selection of what should be taught which Hopkin (2013) noted often related to the choice of relevant textbooks. Consequently, the literature review will examine the evolution of the current story of teaching place in English secondary schools through a selection of key sources of literature, in order to inform my research. The work of Rawling (2001) is selected as she was a member of the original Geography Working Group that developed the first geography national curriculum to contextualise the concept of a national curriculum and the teaching of place within it.

[I]n fact, as other commentators have noted (Butt, 1997; Walford, 1992), although the terms of reference hinted strongly at areas of public concern – places, the value of maps, a framework of knowledge and understanding of the home area and other places in Great Britain and the wider world', the physical environment – they also included some surprisingly progressive references to, for example, 'ways of life and cultures other than their own', 'sense of place', 'progressive development of skills and processes of geographical enquiry'" (Rawling, 2001, p.50-1).

It is interesting to find that that the public identified 'places' and 'sense of place' as areas that they felt should be included within a geography national curriculum. It is also noteworthy that Rawling perceived 'sense of place' to be progressive when it originally had its roots in the earlier humanistic geography of Tuan (1971, 1975, 1976, 1977) and Relph (1976). The public's 'concern' to study place should not come as a surprise considering Cresswell (2015) recognised the concept to be an interdisciplinary one and identified it to be the main concept within geography.

The outcome of this political wrangling was an initial Geography national curriculum where students were expected to learn lists of located information, which was envisaged to address an identified lack of knowledge (Rawling, 2001). This immediately raised concern with Rawling (1991) about the way in which place would or could be taught, especially considering the recognised emphasis given to teaching the concept. It created the following anecdote:

[B]ut - where has this strategy led us? It seems to me that we are now faced with a situation in which particular places have returned to the classroom (if they ever really left!) but teaching and learning approaches designed to develop a sense of place or place awareness are not directly prompted by the Order. Put it another way, we have become obsessed with knowing about places but seem to be no nearer to helping our pupils to understand place (Rawling, 1991, p.289).

Here Rawling questioned what would constitute an appropriate place related content to be studied at key stage 3 and how it should be taught. At the same time, she raised the dilemma of how to teach place to support students' conceptual understanding. This scenario of teaching located knowledge appears to provide limited scope for creative thinking or support for teachers to explore ways of actively engaging students in the study of local places. It resulted in Rawling commenting that unless action was taken, pupils would leave school without having studied places they would remember, using the title of the Beatles' song "Places I'll Remember" (Rawling, 1991, p.289) for the rest of their lives.

Rawling (2017) noted that during the evolution of the following three out of the five key stage 3 Geography national curriculum documents there was a lessening importance given to the teaching of place. However, the fourth version in 2007 included scope for developing phenomenological investigations through 'being in the world' and a 'sense of wonder' (Rawling, 2011, p.68). The way in which this could be developed was left to individual teachers and could be used to stimulate creative work (Rawling, 2011). However, the most recent fifth version followed the ethos of the 2010 Schools White Paper's aim to increase the focus on important knowledge (DfE, 2010). It returned to a study of place with the emphasis on comparative locational knowledge, about a region in Africa and another in Asia (DfE, 2013).

The significance of place as a topic of study is undisputed but the on-going debate resides over what and how it should be taught which led Hopkin (2013) to reflect that there still appears to be more work to be done:

[A] key aim of the first GNC was to re-establish a balanced national geography curriculum by reviving the knowledge and understanding of places, including locational knowledge; as the above analysis suggests, even by 2011 this aim was not met for many, perhaps the majority of pupils (Hopkin, 2013, p.40).

This summary of Hopkin's evaluation of the impact of the GNC, leaves one feeling that it has not achieved a fundamental original aim of improving students' understanding of place. From Hopkin's (2013) narrative this appears to be an identified trend over the course of the evolution of the GNC documents. Indeed, the whole reflective experience left Hopkin (2013) to question whether the GNC had equipped those students who did not opt to study the subject at GCSE, with an adequate geographical education.

Prior to this Lambert (2011b) recognised that the first GNC aimed to redress the study of geographical knowledge following earlier Schools Council projects where it had not been afforded a high status. Indeed Lambert (2011b) argued that the following curriculum reforms of the Geography national curriculums in the 1990s tended to reduce the content and geographical knowledge. He considered now, more than previously it is essential young people have an opportunity to gain an understanding about their place in a shared and interrelated world (Lambert, 2011b). "Developing a deeper understanding of people and place, of humanity's home on planet Earth, is more important than ever in today's world" (Lambert, 2011b, p.249). This statement has relevance with growing concern about our actions in local places having global repercussions.

There is a recognition by Lambert and Morgan (2010) that conceptual understanding of place is notoriously elusive. On reflection Lambert and Morgan (2010) argued that this was partly attributable to place being deemed to be socially constructed through economic, social and political means. Consequently, Lambert and Morgan (2010) argued for a more socially and contextually aware way in which teachers represent places in their teaching. They argued that a romantic view of place had its origin in a time when geographers felt they needed to go out and experience places, through walking and the use of an Ordnance Survey map (Lambert and Morgan, 2010). They used the analogy of places being presented as a developmental palimpsest:

This attitude to places is part of a wider cultural response to modernity and has influenced geography teaching through the work of the local historian W.G. Hoskins, whose book *The Making of the English Landscape* (1955) popularized the idea that the landscape was a palimpsest, one in which generations of human activity have left their mark (Lambert and Morgan, 2010, p.85).

Here Lambert and Morgan (2010) have used Hoskins' view of the landscape where the narrative continued to demonstrate how place was viewed through layers of increasing events, one that idealized the past at the expense of modern developments. Instead

Lambert and Morgan (2010) argued for a more socially and contextually aware way in which teachers represent place in their teaching.

This argument of using an analogy to a palimpsest was employed by Hammond et al., (2018) in their description of how Year 9 students used the 'Layers of London' Heritage Lottery online funded project to learn about place and London. They found the process of learning about a place through incremental layers of historical maps which were likened to a 'geographical palimpsest' helped the students to develop their conceptual understanding of place (Hammond et al., 2018). The map related to the project supported the students to build their layered knowledge and imaginations about developmental place stories (Hammond et al., 2018). Taking part in the activities was an interactive process, one in which the students were actively engaged in manipulating their way around the project. The process of developing the students' conceptualisation of place was noted by Hammond et al., (2018) to be representative of Jackson's (2006) 'thinking geographically' which is geographers' unique way of seeing interconnections and viewing the world. Jackson (2006) applied four pairs of key concepts to tackle geographically related issues, for example space and place were one pair, both examples of geography's grammar. Jackson (2006) used them together with Massey's (2005a) argument that space is equally as grounded as place, to view connections between places across porous boundaries, at varying scales.

These insights are illustrative of the need for sharing a different view of place, one that is inclusive of a broader understanding of place. Lambert and Morgan (2010) are making a case for a view of place that is more inclusive of the whole of society and in the process captures a sense of the ordinariness of place. They further emphasised their point by considering whose story of a place is being shared (Lambert and Morgan, 2010). Their point is demonstrated through taking a simplistic view of globalisation where the local is portrayed as a victim of omnipresent global forces (Lambert and Morgan, 2010). The argument permeating their narrative is for an increased awareness by geography teachers of which lens is being brought to bear in the representation of a place (Lambert and Morgan, 2010). It could be argued that this knowledge should be shared with students to open their eyes to the politics of representing place, whether in geography lessons or the wider media. It could contribute to developing a critical understanding of a place. The work of Lambert and Morgan (2010) is insightful in uncovering the politics of

representing place and their message has far reaching implications for presenting a different way of teaching place.

Meanwhile Cresswell (2008) contributed to the debate about how place is being taught by urging geography teachers to think about the meaning of place, arguing that it would help to prepare students to embrace current issues happening in real places. "As well as being a location, then, place has a physical landscape (buildings, parks, infrastructures of transport and communication, signs, memorials, etc.) and, crucially, a 'sense of place'" (Cresswell, 2008). Here Cresswell provided an avenue for a pedagogy of place, which enabled students to get to know and experience a place in a different way, one that encompassed the plethora of features, which contribute to creating the unique essence of a place. To this, Cresswell (2008) added the means to apply a critical lens: "[T]he symbolism of place similarly reflects the kinds of images that the reflectively powerful in society wish to project" (Cresswell, 2008, p.36). The examination of environmental symbolism would add another way of examining messages about a place.

Incorporating an element of criticality in the study of place, would provide an opportunity to actively engage students in the study and introduce them to the idea that purposeful decisions have informed the positioning of different land uses. To actively engage in this dialogue about land use patterns through artefacts, local knowledge or fieldwork would encourage students to develop a questioning approach and attitude to how they engage with the study of place. They would become more aware of active decisions about a landscape, which have been influenced by political, economic, social and cultural factors. Through this statement Cresswell (2008) is providing a road map to a different way of studying place, one that would encourage students to be more discerning about a landscape. However, these comments were made in relation to the teaching of A level geography, so could have more relevance for students studying the subject at a more advanced level.

Lambert (2017) meanwhile has clearly recognised the significance of place as one of geography's 'big ideas' alongside space and the environment which form the 'heart' of a school geography education. These he argued can be used to educate young people to enable them to think geographically (Lambert, 2017). However how teachers can achieve this within the content rich confines of the GNC will, he acknowledged take considerable resourcefulness (Lambert, 2017).

2.3 A recognition of gaps in the teaching of place

It is at this point that it is necessary to consider what are the aims of a geographical education, which Lambert (2013) considered should prepare young people to engage with the challenges facing our survival on planet earth. This element of the study of place is missing from the existing key stage 3 Geography programmes of study “in current discourse about sustainability and even the environment it is as if the link between geography and education has been severed” (Lambert, 2013, p.91). At the same time, Lambert (2013) is fully aware that education alone is not a panacea for the environmental issues we are currently facing but argued that it can introduce young people to a future world and their place within it. He notes: [A]ll genuine learning must, in the end, be capable of changing the individual – what they ‘see’, how they see it and their capacity to use this knowledge. This feeds back into how they see themselves in the world” (Lambert, 2013, p.92). As a result, a study of place should have the potential to interest and engage young people more deeply if it is going to fulfil this ideal and influence how they see themselves within a place. This view could extend to how they perceive the consequences of their actions within a place. Developing the geographical education recommended by Lambert (2013) is demanding, especially as the GNC has removed sustainability and the environment from its content. Nevertheless, these aspects of geography and indeed, place, are vital in Lambert’s (2013) view of a geographical education. There is an increased urgency for their inclusion in a KS3 curriculum as this is some students last point of contact with the subject geography.

Nevertheless Lambert (2013) argued that content does matter as it can have far reaching consequences for young people’s conceptual understanding. Consequently, he advocated adopting a constructivist educational pedagogy, one that provided the infrastructure to support young people to deepen their conceptual understanding. This interpretation of learning provides the geography teacher with an active role in curriculum planning (Lambert, 2013). Here Lambert (2013) suggested this is achieved within geography by using its wealth of disciplinary expertise. However, by casting the net further afield, it may provide the means of how to travel with a different view, taking the GA’s (2009) manifesto’s title, to engage with the study of place.

Such a search would not come as a surprise to Rawling (2011, 2018) who is critical of the way in which place is taught in schools:

My concern is that school geography, as currently taught, encourages young people to focus primarily on descriptive analytical approaches to the visual and material features of places – the observed landscape, the challenges which the physical/natural world provides, economic and social changes – and to undervalue the poetic, the emotional and the spiritual dimensions of ‘being in place’ (Rawling, 2011, pp 65-66).

This conception of a way in which place is taught, does bring into question whether a passive education, one that relies primarily on one mode of communication, a descriptive observational one, is really an appropriately engaging education fit for the twenty-first century. Here Rawling is offering different genres to enable students to express their affective connections with a place, for example through poetry. In the process, there is a suggestion that it may provide a route into creating deeper place connections. Such an approach would bring the discipline’s study of place, closer to contemporary work in cultural geography in higher education, where she has recognised exciting developments taking place (Rawling, 2018). Innovative suggestions could be integrated into curriculum planning in studying place, which Lambert (2017) has recognised will take innovative thinking.

Rawling (2011) felt geographers should use poetry for exploring and expressing their deeper meaning about a place. The writing of a poem offers a chance for individuals to share their aesthetic feelings for a place. In fact, Lambert and Morgan (2010) foresaw the opportunity of poetry to stimulate students’ ‘geographical imaginations’, Rawling (2011) argued that poetry could be explored to express being in place and our relationships with our surroundings. She is adamant that geographers should explore different ways of connecting with a place (Rawling, 2011). Traditionally geographers have been assigned the role of exploring more scientific place relationships but Rawling (2011) feels this should be extended to include literary means of representation. “Reading and writing place may be one way to help pupils to reconnect with, as well as to understand the world” (Rawling, 2011, p.66). Here Rawling suggests a different way of personally connecting with place, one that suggests a way of cerebrally and affectively engaging with a place, while at the same time potentially having wider environmental benefits in increasing awareness of being in place.

Returning to Lambert and Morgan’s (2011) exploration of different ways in which place is explored in teaching, there is a case for sharing with students the lens that is applied to how a place is represented. Such an inclusion could potentially stimulate a critical

engagement with the politics of a place's representation (Lambert and Morgan, 2010) and through sharing it with students increase their ability to apply a critical lens to the study of a place. Students could be taught to develop a critical gaze.

When particularly examining the current GNC Rawling (2018) noted that in its knowledge-based approach to the study of place, little progress appears to have been made in actively engaging young people in a critical place education: "To study place is not to retreat to an outmoded world of 1950s regional geography; to describe and imagine past, present and future places is not to take an intellectual 'soft option'" (Rawling, 2018, p.55). Here Rawling is clearly indicating that she perceived a descriptive approach to the study of place to be inappropriate at this point in time, implying that it does not have the intellectual rigour to either engage or integrate young people in a critical study of place. To add depth to her analysis of the way in which place can be studied, Rawling (2018) referred to Cresswell's (2015) identification of three ways of studying place. This firstly referred to a 'descriptive' regional approach, the second approach was described as 'social constructivist' in terms of encompassing a range of critical approaches including feminist, post-structural and post-colonial while the third was a 'phenomenological approach' (Cresswell, 2015, p. 52) which reflected being in place. The current GNC appears to be situated in the first approach, while one is left wondering what the other two approaches could offer students if they were included in the study of place. Indeed, Rawling (2011) questioned why geography is not actively exploring sensory place engagement. She considered investigating such an avenue would be to the advantage of the discipline and potentially enrich geography's place teaching (Rawling, 2011).

There was a recognition by Frances Slater (1992) in quoting R.S. Peter's inaugural lecture at The Institute of Education, as the title for her chapter "'_____ to Travel With a Different View'" in Naish, M. (1992) that to be educated is to travel with a different view, but first we need to encounter a number of different viewpoints. In so doing she argued it required a pedagogic approach that raised conscious awareness of different views amongst students "[W]e might also extend the metaphor and begin to see that in initially acquiring the capacity to travel with a different view, we are then enabled to encounter yet more views on the journey, to travel in a way which is increasingly worthwhile" (Slater, 1992, p.113). This capacity would provide students with a critical lens with which to encounter new places and equip them with the ability to identify mismatches between stated ideologies and realities. Such an education would not constrict thinking and would

equip the recipient to be able to think for themselves. Interestingly this aim is apparent in the GA's 2009 Manifesto *A Different View* which showcased how a geographical education could introduce young people to key ideas facing our planet. In his introduction as Chief Executive of the Geographical Association, Lambert (GA, 2009) acknowledged that the process could include developing interdisciplinary links and explore different ways of engaging with the study of geography. The tone was investigative about how the future path was still to be written with fieldwork providing an opportunity to stimulate students' innate curiosity (GA, 2009). The document was far reaching in showcasing the merits of travelling with a geographical perspective and referred to the range of artefacts at geography's disposal to achieve such a quest, including the use of maps, images and graphical means of portraying data: "An essential educational outcome of learning geography is to be able to apply knowledge and conceptual understanding to new settings: that is, to 'think geographically' about the changing world" (G.A., 2009, p.9). This statement is included here as Morgan (2013) has deliberated over whether we are enabling students to think geographically or merely encouraging them to develop their thinking skills. Firstly, this required careful consideration of what thinking geographically really meant and Morgan (2013) referred to Lambert's interpretation of thinking geographically which he promoted during his term in office as Chief Executive Officer of the Geographical Association and included the ability to transfer conceptual knowledge to fresh locations. This is particularly relevant to establishing an alternative way of teaching place, which has been identified by Jackson (2006) as the first of his three key geographical concepts, along with space for thinking geographically.

When making his case for thinking geographically Jackson stated: "Geography, I argue, enables a unique way of seeing the world, of understanding complex problems and thinking about inter-connections at a variety of scales (from global to the local)" (Jackson, 2006, p.199). It is this view of thinking geographically, the ability to see inter-relationships, that is being taken and applied to develop students' thinking about their study of a place. However, there is still a need to find a different way of achieving this, one that does allow students to develop their conceptual understanding of place.

However, Rawling (2018) has acknowledged Cresswell's (2008) plea for different ways of engaging students with place, while at the same time noted that the recent GNC (2013) does not facilitate such an approach, with its emphasis on a descriptive knowledge led curriculum. In addition, Lambert (2017) considered geography has the tools for

investigating what the concept of place can do or on a positive note, can achieve. There is a clear message suggesting a need to find a different way of engaging with the study of place, which has been identified by Lambert (2017) as a key part of geography's grammar. Furthermore Rawling (2018) bemoaned how the GNC, since its inception in 1991, has favoured a descriptive approach to the study of place, one that is further emphasised with its knowledge turn in the 2013 GNC. At the same time, she recognised there is scope for the introduction of a wider range of ways of representing place in the current GNC, but noted how this plays out, will depend on individual interpretations (Rawling, 2018). In addition, Morgan (2013) in his overview of questioning the purpose of key stage 3 geography, was left wondering whether it has led to a deepening conceptual understanding. Moreover Rawling (2018) argued that place is a key idea for the twenty-first century and to bring the study in line with developments in the USA (Larsen and Harrington, 2018) needs to explore the nature of progression in relation to its developing conceptual understanding.

Rawling (2018) recognised that understanding of place appears to be at a standstill in schools while it has moved forward in academic geography due to links made with philosophers in their study of place. She particularly remarked upon the work of Wylie (2007) and Lorimer (2005) and on border crossing with other disciplines. From these remarks Rawling (2018) notes: "[L]ittle of this 'buzz' has yet been felt in school geography, though the opportunities do exist" (Rawling, 2018, p.52). Perhaps the time is ripe to explore this identified gap between school geography and research geography, to find ways of increasing student conceptual understanding of place.

In the next section there is an overview of the use of fieldwork to support the teaching of place and development of conceptual understanding.

2.4 Fieldwork in key stage 3 Geography

The key stage 3 GNC (DfE, 2013) has made fieldwork a statutory requirement so affording it a key position within geography teaching and providing a means for integrating different aspects of the subject (Rawding, 2013). Fieldwork has long been recognised as having a lasting impact on students (Rawding, 2013). Consequently, this section examines how fieldwork is interpreted within key stage 3 geography: "[F]ieldwork – that is, learning directly in the untidy real world outside the classroom – is an essential component of geography education" (GA, 2009, p.23). From this interpretation of fieldwork, it clearly is

an essential part of teaching geography and from this position, its use is being examined in relation to the teaching of place.

Fieldwork is recognised in the GA's (2009) manifesto, *A Different View*, and is far reaching in encouraging young people to be exploratory, especially through fieldwork. The value of fieldwork is similarly endorsed by Ofsted (2008) in *Learning outside the classroom*, which recognised the value of fieldwork: "[T]he first-hand experiences of learning outside the classroom can help to make subjects more vivid and interesting for pupils and enhance their understanding" (Ofsted, 2008, p.7). In addition, they valued the ability of fieldwork for addressing under-achievement and it was found to have left students with lasting memories of their experiences (Ofsted, 2008). It is with this level of backing that fieldwork is pursued to provide an opportunity to support experiential place understanding.

Fieldwork is perceived as integral to teaching about a local place, especially as Ofsted (2013) considered it plays a key role in supporting conceptual understanding. However, in their 2011 subject report Ofsted found: "[F]ieldwork was underdeveloped in the majority of the secondary schools visited" (Ofsted, 2011, p.45). The report went on to recognise that in the schools where it did take place, which was only half of the schools they visited at key stage 3, it did have a motivational effect (Ofsted, 2011). The document does not showcase examples of good practice, which leaves room for investigating different ways of engaging young people in their study of place. The motivational value of fieldwork is endorsed by the GA (2009) but like Ofsted the GA recognised there is scope to investigate how this can be achieved. Indeed Hammond (2018) noted the paucity of support available from the DfE to help teachers to develop fieldwork in their key stage 3 programmes of study.

Kinder, a Chief Executive of The Geographical Association and part of the team of experts who advised the DfE on the 2013 GNC, endorsed the fieldwork experience for providing young people with an opportunity to explore (Kinder, 2013). He argued for fieldwork to fulfil its potential, as recognised in Ofsted's (2008) *Learning outside the classroom*, it required clarity and a clear goal. The Ofsted (2008) report recognised the value experiential learning made to young people in terms of motivation and in contributing to building conceptual understanding. At the same time Ofsted (2008) appreciated the opportunity the senses provided in focusing young people's connection with their

surroundings, but this route is not recognised in the current key stage 3 GNC. This suggests this avenue could be explored to support the identified gaps in students conceptual understanding of place referred to in the previous sections (Rawling, 1991; Lambert and Morgan, 2010; Hopkin, 2013; Rawling, 2018). Moreover Rawling (2013) recognised fieldwork provided students with lasting memories of their study of place.

In his examination of fieldwork teaching Kinder (2013) identified varying levels of teacher control which ranged from the observational extending to hypothesis testing to discovery fieldwork and finally sensory fieldwork. These he categorised into five groups, drawing on the earlier work of Job (1999) and varying in the level of pupil autonomy from firstly passive observation, as part of teacher led excursions, which may be appropriate where locational knowledge needs imparting (Kinder, 2013). In discussing hypothesis testing Kinder (2013) recognised that in schools it can be associated with mechanistic data collection. This he noted could be further limiting when students are not involved in discussing the formation of the hypothesis so reducing their engagement in the fieldwork activities (Kinder, 2013). This approach has been linked to earlier positivist thinking within the subject by Kinder (2013) especially where hypotheses are chosen with recognised outcomes identified in textbooks. Indeed Widdowson (2017) noted that hypothesis testing remains the main approach to fieldwork adopted by school Geography departments. One of the reasons Widdowson (2017) attributed to its continued popularity is its linear progression, which is perceived to help guide students through their data collection and representation of their findings. Nevertheless Widdowson (2017) recognised that hypothesis testing has come under scrutiny of late, regarding the extent to which it engages pupils through its recourse to monotonous data collection. A similar conclusion was reached by Job (1999) in *New Directions in Fieldwork*, where he felt there was more meaning to a place than could ever be conveyed through numerical data collection. These comments add strength to the argument to explore alternative avenues to convey a sense of place.

On returning to Kinder's (2013) recognition of five fieldwork approaches, the third is enquiry, based on asking questions which are meant to stimulate curiosity but may be value laden in their tone. The last two are experiential and require more autonomy of the learner, with the fourth being discovery, which requires students to explore a place for themselves which could, Kinder (2013) felt include taking photographs but he cautions that it can be risky in terms of the outcome being uncertain. He suggested the inclusion

of controls in the form of spatial and temporal limits which could offset some of the potential health and safety risks (Kinder, 2013). He noted that it would require 'trust' to ensure students did remain engaged, but on the plus side it could stimulate positive behaviour (Kinder, 2013).

The final approach which Kinder (2013) termed 'earth education' as a synonym for sensory fieldwork, provided an opportunity for a deeper place connection. However, at the same time he recognised this approach to be 'rare' in schools and identified a paucity of research in this area (Kinder, 2013). Concurrently Kinder (2013) recognised the current GNC is less prescriptive which provides scope for more teacher autonomy. This suggests the time is ripe to introduce a different approach to fieldwork: "[P]erhaps the question to be asked of school geography fieldwork, then, is not whether it meets its stated objectives, but how we may encourage it to do so" (Kinder, 2013, p. 190). This opens the way to explore different ways of collecting and communicating information about a place. In fact, Kinder (2013) welcomes different ways of engaging young people, especially as [Ofsted's \(2008\) *Learning outside the classroom*](#) recognised the potential of using the senses to further experiential learning. This research aims to add to this identified lacuna and to contribute to knowledge of how students use their senses to study a local place as part of their geography fieldwork.

In addition, Kinder (2013) recognised the potential of fieldwork for developing the affective domain. He foresaw its ability to develop social relations between geographers: "[I]ndeed, it could be argued that fieldwork is central to the socialisation of geographers" (Kinder, 2013, p.48). This comment raised awareness of the numerous benefits of fieldwork, with the social aspect having potential to add to the well-being of students being outside and working alongside their peers. Consequently, the social element of working in groups during their place fieldwork investigations should not be overlooked especially as it could influence how students view and experience a place.

In a similar vein to Kinder's (2013) last three approaches, Phillips (2012) recognised the potential of fieldwork to invoke curiosity as a means of stimulating student interest. However, Phillips (2012) noted more creative elements of outdoor investigations have been instigated by other disciplines than geography, including the work of artists. There has been a tradition of curiosity led fieldwork in the study of place in Higher Education, which was heralded with the cultural geography work of Burgess and Jackson (1992) but

this present research is situated in school based eography. This reinforces Rawling's (2018) recognition of the split between academic and school geography with the inception of the national curriculum:

After 1987, geography was engulfed in the 'Great Education Debate', which led inexorably to the National Curriculum and increasing state control of education. From this date can be traced the gradual separation of academic and school geography. Whereas academic geography became more diverse and innovative, school geography was subject to greater restriction giving fewer opportunities for innovation and change (Rawling, 2018, p.50).

Nevertheless, in her overview of a selection of articles related to fieldwork in *Teaching Geography*, Cook (2010 and 2011) found - in spite of changing methodological and pedagogic approaches a united recognition of the significance of fieldwork to the teaching of geography. Fieldwork was perceived to be at the core of geography and would play a part in future developments within the subject (Cook, 2015).

However, exploring new approaches are not without recognised risks which House et al., (2012) noted could take the form of mental challenges for the participating students rather than affecting student physical safety. At the same time the organisation of more challenging activities was found to be recognisably demanding for the teachers involved but at the same time having the potential to create subsequent benefits (House et al., 2012). 'Risky fieldwork' has clear objectives but the outcomes are uncertain and can be unforeseeable (House et al., 2012). By exploring different ways of engaging with fieldwork House et al., (2012) felt it prevented falling into the trap of repeating well-rehearsed activities where the outcomes were 'known' and in the process there was a risk of becoming less engaged: "[T]he more often we do an investigation, the more assumptions we make that students understand the techniques we are asking them to use. So ironically, the risk of unsuccessful learning experience increases significantly as practitioners and (other) learners become disengaged" (House et al., 2012). Instead House et al. (2012) want to break the tradition of traditional hypothesis testing approaches, where the thinking occurs back in the classroom after the data collection and instead instigate more learning in situ. To achieve this House et al., (2012) reduce mechanistic data collection and encourage more active learning through findings ways of supporting students to engage with the 'bigger picture'. Suggested ways include taking photographs and videos to record anomalies and prepare the students to see it is alright to fail in their move into uncharted territory (House et al., 2012). While at the end of

these experiences House et al., (2012) recommend mounting a display of the students' findings to showcase their achievements. This enabled them to foresee long term benefits in terms of developing independent learners and contributing to the recognised gap between school and degree courses in geography (House et al., 2012).

The search for greater diversity in school fieldwork pre-dates the inception of the national curriculum with Hawkins (1987) calling for more pupil participation. This was recognised as a way of increasing pupils' environmental awareness to support their acquisition of relevant conceptual understanding and encourage them to take a responsible and possibly active interest in the environment (Hawkins, 1987). He argued that it is essential to base environmental awareness on personal experience that should extend beyond completing closed activities and provide students with an opportunity to explore their interests (Hawkins, 1987). Such an approach he felt would allow students to take ownership of their work and in the process develop real understanding (Hawkins, 1987). He illustrated his ideas in relation to innovative French fieldwork based around exploring the 'milieu' which he likened to discovering a 'sense of place' based around using the senses (Hawkins, 1987). He concluded by commenting that such an approach could create fieldwork which left a lasting positive legacy for the recipient and ultimately the environment (Hawkins, 1987). These comments still appear to have a message that is relevant today. Bearing these parameters in mind the next section will examine the study of place in school fieldwork.

2.5 Fieldwork and the study of place

Taking a more current view of the study of fieldwork within the English national curriculum there has been a growing awareness of our feelings being recognised with Cook (2010) exploring the personal experiences of Year 9 students from three schools. Cook (2010) recognised the importance for students to develop a 'sense of place' although at the same time noted it can be an overlooked area of fieldwork. In one school the students' created an experiential field sketch of a boulder clay cliff through touching different rock types. In another school the students developed a sense of place, which Cook (2010) recognised to be an undeveloped activity. In the third school, the students' sensory experiences of having visited Malham Cove were explored through interviews at a later date following the visit (Cook, 2010). The two key research methods explored in this investigation related to being interviewed and carrying out experiential field

sketches, both of which established the value of sensory fieldwork (Cook, 2010). The relevant activities were teacher directed with the whole class carrying out the same activity. This suggests there is scope to extend this area of research through allowing the students to have an input into shaping the planning and route of enquiry of their group investigations.

In a similar way to Cook (2010) and Job (1999), Selmes and Wallace (2014) recognised a sense of place can be an undeveloped area of fieldwork and argued the case for increasing the profile of place in a Year 9 fieldtrip they organised to Skegness. This was achieved through recognition of Job's (1999) suggestion of the need for time to acclimatize which was achieved through taking the students on a guided tour of Skegness (Selmes et al., 2014). In pairs the students took part in a scavenger hunt and collected information from different locations including photographic evidence of redevelopment to test against Butler's model of resort development (Selmes et al, 2014). They collected information about the resort's layout to compare with a 1958 model of land use in a coastal resort (Selmes et al., 2014). The students were active learners in following clearly defined paths in collecting a diversity of quantitative and qualitative data. However, the question of caring or connecting more deeply with the place does not appear to have been discussed.

The potential for investigating a sense of place through fieldwork was recognised by Job (1999) when he noted the increased student understanding gained from interpreting the multiple facets of human and physical aspects of a landscape which contributed to its unique nature. However, he appreciated fieldwork based on data collection alone failed to create a sense of place, suggesting the need for an opportunity to reflect over place experiences (Job, 1999). Consequently, the remarks suggest there is an opportunity to extend place investigations beyond nomothetic seeking data collection, often instigated through hypothesis testing (Job, 1999) and explore other ways of being in a place. These remarks point to the need for the development of more individual interpretations of a place, to increase the opportunity for students to understand its unique spatial configuration and workings.

2.6 Somerville's alternative place pedagogy

This is an initial introduction to the work of Somerville which is further developed in the next theoretical chapter as her work will inform the conceptual framework guiding this

research. The need for a different way of studying place was raised in Australia by Somerville et al., (2009, 2011) in response to growing concerns about environmental and economic issues facing our planet. There is a realisation that existing scientific technical projects have not provided definitive answers to our environmental problems, which include the failure of large water transfer schemes. This has led to searching for an alternative way of introducing young people to get to know their local places in such that a way that they will create a different relationship with their surroundings, one that includes all the elements, human and non-human (Somerville et al., 2011). In achieving such a quest, Somerville et al., (2011) are not motivated by passing on a closed set of learning objectives but instead are interested in searching for ways of exploring how to encourage young people to live more responsibly and creatively. The following question has guided her search: “[H]ow might we educate a generation of children ‘growing up global’, to be attached to their local places, to inhabit, and to know place differently?” (Somerville, 2010, p.341). There are parallels here with the GA’s (2009) *A different view*, discussed in the previous section, with the question both are seeking to answer being how to make such a curriculum happen and have a lasting effect on young people.

In Australia, Somerville et al. (2009) questioned why educational research appears to have abandoned the search for alternative ways of relating to being in place. To fill this gap, Somerville (2007a, 2007b, 2007c, 2008a, 2008b, 2010, 2012, 2013b, 2015, 2017, Somerville et al., 2009, 2011) have called for a different place pedagogy, one that is interdisciplinary. This study is interested in exploring the elements of such an approach that could be applied to a study of place in secondary geography, to support young people in their understanding of the complex concept. The inter-disciplinary nature of the Australian coverage is clear which means not all aspects of the responses are relevant to an English geography curriculum. However, there is a shared understanding that: “[W]hat we do to the planet we do to ourselves.” (Somerville et al., 2011, p.2). Here Somerville et al. are searching for a responsible way of living more interdependently in our shared world. She is searching for an educational answer for engaging young people in the study of place in view of the environmental challenges we are all facing. The study of place is contextualised within the boundaries of planet Earth which Massey (2014) recognised as a place.

These local/global links are particularly evident in Australia where there is an ever-present threat of the consequences of climate change, especially prevalent in areas

suffering from drought (Somerville, 2013a). However, such a view although not apparent in the current GNC is evident in Massey's (2009) contribution to the GA's (2009) Manifesto, in which she clearly envisaged there to be a global element in local places, with the world itself perceived as a place. Consequently Somerville's (2010) search has parallels with the GA's investigation into creating an education to create a different view of our being in the world. This review aims to extrapolate key ideas relating to ways of exploring relations to local places, for further development in the theoretical framework in the next chapter.

The broader inter-disciplinary view of place adopted by Somerville (2010) was chosen because it provided another dimension to the teaching of place, through her work with Aboriginal and Torres Strait Islanders. This study is concentrating on her deeper place relations gained from insights gleaned from Aboriginal and Torres Strait Islanders ontologies and epistemologies, which will be examined in the next chapter (Somerville, 2010, p.330). Here they can be seen to influence her understanding of place: "[P]lace, that is, both a specific local place and a metaphysical imaginary, was presented as an alternative lens through which to construct knowledge about the world" (Somerville, 2010, p,330). Adopting a holistic view of place was recognised by Somerville (2010) as being as helpful as a technical scientific investigation in developing a different place perspective. It is at this juncture that Somerville (1999) started to explore different ways of representing stories about a place. She associated these stories with a sense of belonging, but at the same time realised other people would view the same landscape from a different perspective and would tell a different story about the same place (Somerville, 1999). It was through listening to Aboriginal and Torres Strait Islander stories that she reflected over her privileged representational position in being able to write down her stories, which was not the case with all members of a traditionally oral culture.

The sense of belonging in a postcolonial landscape was further developed by reading the work of Elizabeth Ferrier (1990) whose unpublished PhD thesis developed the idea of having a whole bodily presence. Here Ferrier (1990) (cited by Somerville, 1999) felt a postcolonial view of Australian culture allowed for the inclusion of historical and political perspectives and in the process rejected a postmodern lens which she associated with a spatial view of European settlement. The adoption of a postcolonial lens allowed for the inclusion of whole bodily knowledge as opposed to dissecting the mind and body, which Ferrier (1990) associated with modernist spatial techniques like mapping, surveying and

construction which she considered signalled colonial domination. It is through exploring this whole bodily understanding of being in the landscape and how to represent different people's understanding of their emplaced experiences that has led Somerville (1999) to explore a variety of mediums for representing deeper place insights.

Even in her earlier place explorations, Somerville (1999) identified the opportunities provided to view place through an alternative experiential lens, from having an embodied place presence in moving through a landscape. In the process of meeting with different groups of Aboriginal and Torres Strait Islanders she realised the need to navigate a path through a minefield, resulting from the postcolonial issues for example of land rights (Somerville, 1999). At the same time Somerville (2010) identified and explored the opportunities provided by different genres for expressing her deeper place insights, through poetry, photography, stories, journal writing and artefacts, so sowing the seeds of different ways of investigating being in a place while negotiating an appropriate means of communicating her knowledge. All of which have contributed to Somerville's (2010) formation of a place pedagogy which is focused on three essential parts of learning about place: embodied and local; relating to place through stories which is broadly interpreted to include other representations; with deep learning occurring through encountering different contesting stories. This place learning leads to a different ontology and epistemology which is related to getting to know oneself in a different way through a whole bodily connection with the human and nonhuman aspects of a place. The development of the thinking behind this dynamic place pedagogy will be developed further in the next chapter.

2.7 Gruenewald, critical place pedagogy and place-based education

The work of Gruenewald (2003a, 2003b) has been recognised by Somerville (2010) to be influential in shaping her thinking about place and pedagogy. This was particularly evident through his place critical place-based education, which in turn was influenced by liberal humanists like Berry and Bell and Lai (2006). The later are focused on more radical place-based education with a clear link to local culture and ecological well-being (Bell and Lai, 2006). This approach has been criticised for adopting an outmoded somewhat romantic view of place, which does not encompass multicultural perspectives (Bell and Lai, 2006). While Kupper (2015) in his interview with Agrarian philosopher, author, Berry, demonstrated our links to nature through his poetry and a rural way of life but it is a way

of life not shared by many. Consequently, this section is concentrating on examining the alternative ideas of place-based education from Gruenewald's critical place pedagogy including examples of work by Sobel (2013) and other proponents of the approach.

Traditionally critical pedagogy is urban and social while place-based education is more rural and environmental, although both are experiential and share an association with local communities (Gruenewald, 2003a). They share the goal of working towards social improvement through situated projects (Gruenewald, 2003a). However, Gruenewald (2003a) felt both approaches would benefit from listening to one another, to create a more complete approach, to critically engage with the study of a place: "[P]lace-based pedagogies are needed so that the education of citizens might have some direct bearing on the well-being of the social and ecological places people actually inhabit" (Gruenewald, 2003a, p.3). In this respect the aim of a place-based education is to have a lasting impact on the students and the local community they inhabit. It would help to increase links between schools and their local communities.

In his approach, Gruenewald (2003a) chose to combine 'critical pedagogy' and 'place-based education' through 'decolonization and 'reinhabitation', both of which provide the tools to consider how we live in a place. In the process, of identifying them, they can be used to suggest a different way of living in a place (Gruenewald, 2003a). Gruenewald borrowed decolonization from critical pedagogy and required an examination of powerful cultural influences at work in a place. In so doing it provided an opportunity for young people to critically evaluate the working of a place, whether it be social or environmental and identify negative forces at work which are harming people and natural resources. Reinhabitation, provided a route for young people to connect with ecology and suggest sustainable ways of managing a place (Gruenewald, 2003a). The twin response of place-based education provided a different pedagogic response to the study of place, one that had the potential to actively engage those involved: "[P]lace-based pedagogies are needed so that the education of citizens might have some direct bearing on the well-being of the social and ecological places people actually inhabit" (Gruenewald, 2003a, p.4). An interactive solution is being offered that encompasses social and environmental issues through building educational frameworks. This approach works to a different agenda than the English GNC, especially as expressed in Gruenewald and Smith's (2010) educational goals: "[I]f there is a "product" associated with schooling that deserves our attention, that product is the future places in which people live" (p.356). This makes

Gruenewald's (2003a, Gruenewald and Smith, 2010) approach appear radical, through the way in which it is locally based and one approach does not fit all situations. However, it provides the means to actively engage young people in what is happening in their local places. If they take the ability to connect with their local place while in school, this approach could be adapted to wherever they find themselves living out their lives. If this could be the case, it would indeed provide as Gruenewald and Smith (2010) suggested an education for life.

At the same time Bell and Lai (2006) have questioned whether all students will be interested in local social and ecological based politics. While Somerville (2010) foresaw the potential of Gruenewald's (2003a) critical place-based education through the way in which it provided a link between place and pedagogy, in terms of how they function and as humans, we influence their evolution. At the same time, Somerville (2010) was aware of the different contextual situations between North America and Australia, especially in terms of the latter's relationship between indigenous and non-indigenous knowledge. Consequently, she has not adopted a place-based philosophy of education which she felt was counter to her own post-colonial, post-structural and feminist ideologies (Somerville, 2010).

Nevertheless, there are still messages from place-based education that could be adopted to develop an engaged pathway to apply to students' experiences, exploration and engagement in relation to the study of place. In *Beyond Ecophobia*, Sobel (2004) cautioned against asking students to save the planet before they have first got to know their local place. Consequently, he suggested ecological and environmental issues are introduced in a developmentally appropriate manner and tailored to suit their local context:

Place-based education is the process of using the local community and environment as a starting point to teach concepts in language, arts, mathematics, social studies, science, and other subjects across the curriculum. Emphasizing hands-on, real-world learning experiences, this approach to education increases academic achievement, helps students develop stronger ties to their community, enhances students' appreciation for the natural world, and creates a heightened commitment to serving as active, contributing citizens. Community vitality and environmental quality are improved through the active engagement of local citizens, community organisations, and environmental resources in the life of the school (Sobel, 2013, p.11. italics in the original).

Place-based education provides an alternative way of considering how to study a place, one that academically engages students in questioning how their local place functions. Potentially students have an opportunity to contribute to happenings in their local places. The students study place through physically having a presence in their local environment which acts as a stimulus for a range of interdisciplinary activities that include writing poetry, mapmaking and becoming actively involved in designing recycling, composting and waste management programmes (Sobel, 2013). These activities are informed by meeting with local experts in the related field and through contextual activities which have links to the environment (Sobel, 2013). Other related activities included producing books about the local place where a school is located (Sobel, 2013) and has the potential to engage young people in finding out about where they live.

Bigelow, a former teacher, environmentalist and editor of *Rethinking Schools*, is a proponent of place-based education and wrote “How My Schooling Taught Me Contempt for the Earth” (Bigelow, 1996). In this he described how growing up in a Californian school where there was no contact with their local place led him to question the values that were being transmitted: “[T]he repetition of this indoor education taught us that the land beneath this structure was so much inert *stuff* – mere dirt on top of which happens real life. Outdoors is for play, for fun – but not for knowledge of self, culture, or the earth” (Bigelow, 1996, p.15). It in no way prepared him for a career related to the outdoors. As a result, Bigelow (Bigelow, 1996) felt schooling had not prepared him to question the environmental justice of local developments which was considered indicative of progress. On the other hand, this view could be perceived to be reflective of modernity, symptomatic of the era when Bigelow grew up at the end of the 1950s and early 1960s. His education left him querulous of its ethical stance: “[T]he hidden ecological curriculum at Bel-Aire School encouraged students to *not-think* about the earth, to *not-question* the system of commodification that turns the world, including the land, into things to be bought and sold. These are not merely curricular omissions, but active processes of moral anaesthesia” (1996, p.15).

It is more than probable that such an education was indicative of its era. However, Bigelow (1996) goes on to question why this does not appear to have changed and suggests the situation could be rectified by getting children outside to learn a more interconnected ‘ecologically literate’ approach to being in place. His closing statement is thought provoking in encouraging a different way of thinking:

In today's world, a deep ecological consciousness is a basic skill. The "buy until you die" consumer orientation that bombards us from morning until night is not sustainable. The planet is dying, and despite the conceit that suggests we humans are above it all, our fate is intimately coupled to that of the earth, albeit unequally so based on race, class, and nationality. It's about time the entire curriculum began to ask: What about the earth? (Bigelow, 1996, p.17).

To ask such a question would instantly view the situation from a different perspective, with the potential to query the ethics of such a trajectory. It could be used as an inroad into questioning the sustainability of the existing way of living in a place. The enquiry would have equal relevance for people living in urban and rural places. It is searching by questioning the ethics of our consumer society with its consequences for human and nonhuman beings and the place in which we reside, at a local and global scale.

When assessing the impact of place-based environmental educational initiatives they were found to increase student engagement, achievement in tests and reduced behavioural problems (Sobel, 2013). Additional benefits included students' ability to confidently communicate and develop higher order thinking skills (Sobel, 2013). There is a trend of students who have participated in place-based education schemes having improved access to higher education (Sobel, 2013). Participation was found to improve students' ability to solve problems through being able to consider how to tackle fresh situations and build social capital in terms of helping personal and community well-being (Sobel, 2013). This was translated into students participating in community projects which related to water quality, school yard naturalisation, recycling projects, energy conservation and creating a nature trail map with the local school acting as catalysts for improvements in their local places (Sobel, 2013).

In work with Smith, an exponent of place-based education, Gruenewald (2010) demonstrated how a more place aware education can contribute to developing the human capital of young people: "[P]lace-conscious education provides one strategy for developing in people the capacity to reclaim the inventiveness, imagination, and courage that over millennia allowed our predecessors to make use of the possibilities provided by the planet wherever they found themselves" (Gruenewald and Smith, 2010, p.xxii).

In encouraging independent thinking, a more aware place-conscious education would support students to become more independent thinkers and prepared to tackle the unexpected events in their local places. They draw heart from the fact that historically

people have used their ingenuity to work together to live sustainably and they emphasise the need for local initiatives that are relevant to meet local requirements, rather than rolling out standardised plans (Gruenewald and Smith, 2010). This approach to education would indeed encourage independent critical thinking. The question is whether in the days of accountability and league tables these ideals will be sufficiently valued to gain political backing and funding. The ethos of the movement is summarised by “[P]lace-based education once more taps into this ancient relationship of mind and body with the world” (Gruenewald et al., 2010). In fact, Gruenewald et al., (2010) note there are positive reports from teachers who have engaged with place-based education, especially in terms of improving student participation. Gruenewald et al., (2010) felt if young people have connected with their local place, they are more likely to be concerned about its future well-being and that of the related commons.

Place-based education has high ideals but realistically would like to provide a voice for local issues and concerns which could be incorporated into contextualised education programmes so would go some way towards integrating all sectors of the community (Gruenewald et al., 2010). The concern is whether the authors realise what they are asking of already hard-pressed teachers, although the pay-off could be exponential in terms of student engagement and motivation. Concerns are raised about the need to tackle local prejudices about executing practical work in the community when high status knowledge is seen as a preferred course for young people (Gruenewald et al., 2010). In addition, teachers may not have the necessary local knowledge to support or develop such projects (Gruenewald et al., 2010).

The UK geographer, Morgan (2012) recognised the benefits of a place-based education but he did not consider it possible to transpose a programme developed in a different context. Instead he advocated local grassroots projects that meet the needs of local schools (Morgan, 2012). In so doing he recognised the UK is behind in adopting a place-based educational approach, by choosing to concentrate on a knowledge led subject based curriculum (Morgan, 2012). Nevertheless he has identified local initiatives like the Geographical Association’s ‘Building Sustainable Communities’ and other regional projects like the Cornish Sensory Trust (www.sensorytrust.org.uk) with outdoor sensory activities aimed at young and old people (Morgan, 2012). While along similar lines, the Cornish Sense of Place charity (www.sense-of-place.co.uk) provided county based activities around local features with an inter-disciplinary approach mainly aimed at key

stages 1 and 2. All these initiatives suggest there is an interest in involving young people in the working of their local places, especially for their own and their place's well-being, but at this point in time it appears to be underdeveloped in the secondary geography study of place.

In conclusion, a place-based education could provide an opportunity to introduce young people to the diversity and functioning of local places. The question of how this is achieved will remain as suggested by Somerville (2010) and Morgan (2012) open to local contextual circumstances, whether they be cultural, or curriculum based. However, the movement has started the conversation about how we live our lives in local places, and how they could be lived in a different way, one that could be more socially and environmentally sustainable. This as Gruenewald and Smith (2010) perceived could provide an opportunity to re-engage with how our ancestors lived in their communities, in ways that connected their whole selves, mind and body. However, such an approach in concentrating on the local is not without its critics, especially in being considered to provide a myopic interpretation of our existence, at a time when we are being urged to think relationally by the GA (2009) and foster local/global interrelationships.

2.8 Summing up and situating the research

The review of literature relating to the teaching of place in schools has raised pedagogic issues relating to the understanding of the concept. Place has been recognised as one of the most significant concepts in geography by leading academics (Massey, 2014, Cresswell, 2015, Lambert, 2017) and yet it seems to have evaded understanding in school geography (Rawling, 1991, Cresswell, 2008). However, this awareness is happening alongside an on-going debate about the complex nature of the abstract concept (Rawling, 2018). At the same time the importance of teaching place is recognised in the revised Geography key stage 3 document (DfE, 2013) although it does not provide scope to explore relationships with well-being, sustainable development or climate change. At the same time Hopkin (2013) recognised it leaves environmental geography to be less significant than in the first 1991 national curriculum. Added to this is the limited guidance in the current GNC for making connections which Hopkin (2013) recognised along with a weaker enquiry approach than earlier GNC documents. On the other hand, this provides scope for "pedagogic ingenuity" (Lambert, 2017, p.20) which this research aims to contribute to.

The understanding and interpretation of place has evolved with changing paradigm shifts within the discipline. Cresswell (2015) identified three approaches to the study of place: a 'descriptive' approach which has its roots in regional geography; a 'social constructionist' approach which focused on social phenomena, Marxism, feminism and post-structural thinking; a 'phenomenological' approach which relates to the human experience of place which is sympathetic with humanistic and philosophical thinking about place. This summary provides an overview of the influences which have shaped the pedagogy of place in secondary geography.

These approaches have been mirrored in changes in the teaching of place in schools, which have in turn ranged from descriptive regional geography to an analytical social science approach, followed by a phenomenological humanistic geography perspective (Rawling, 2011). It was during the 1980s that Rawling (2018) remarked upon the separation between school and academic geography, which was the point when she felt academic geography became more avant-garde in its search for new ideas relating to place. At the same time, she felt place to be one of the key ideas that has suffered from the rift between school and academic geography and has continued with the inception of the national curriculum (Rawling, 2018). This is particularly evident in the expanding work being carried out in relation to creative geography as demonstrated by Hawkins' (2011, 2012, 2014, 2015) explorations of work in relation to geography and art. This was apparent in her arts based project, *Caravanserai*, which led to a collaborative book with the artist Annie Lovejoy, *Insites* (Hawkins and Lovejoy, 2009). This research aims to explore different ways of engaging students with the study of a place, to invigorate the study of place in key stage 3 GNC, especially as Hopkin (2013) noted: "its selection of content would be largely familiar to those teaching the subject 50 years ago" (p.64).

There are other exciting projects taking place in higher education which relate to sensory place explorations through movement (Paterson, 2009) which have implications for how fieldwork can be carried out. Here Paterson (2009) recognised a lacuna in research relating to the body and the use of haptic senses in movement and in relation to different locations. This gap between experiential sensory fieldwork and its representation has been raised at the academic level by Paterson (2009) and yet it would provide a different way of exploring and experiencing a place. Here Paterson (2009) does suggest the opportunity for exploring the use of poetry, with its use of similes, metaphors and rhythm. These discussions have identified gaps in how to transpose sensory experiences

into language, which will be explored further in the theoretical framework and methodology.

Rawling (1991, 2011, 2018) has consistently argued that students be given an opportunity to use their imaginations to reflect their views of place and has suggested an avenue could be explored further in relation to poetry in secondary geography. This will be developed further in the next chapter, the theoretical framework.

Chapter 3

Conceptual Framework

3.1 Introduction

The conceptual framework has become the driving engine for the research and in the process has evolved, as suggested could happen by Miles, Huberman and Saldana (2014). At the same time this is reflective of Maxell's advice "that a conceptual framework for your research is something that is *constructed*, not found" (Maxwell, 2013, p.41). It has become a means to support meta-level thinking that has encouraged reflection about the trajectory of the research, which in this instance is especially the case in creating a way of representing the findings. The conceptual lens of two academic figures, Somerville who has linked pedagogy and place and Massey, who has provided a searching geographical interpretation of place has informed the development of this research.

The chapter builds upon the view that these approaches, while operating at different scales, are deeply complementary. The chapter will also argue the need for establishing a means of representing the data that aligns with the work and positions adopted by Somerville and Massey. Here, the concept and practice of multimodality, viewed through the work of Kress and Jewitt, is introduced. To conclude the chapter will provide a visual summary and written commentary of the conceptual framework which has evolved to shape this research. The chapter ends with a discussion of the research questions.

3.2 'Placing' Somerville and Massey

As a researcher it is most unlikely that you will have a complete understanding of a situation but if one's own positionality is discussed, there is a shared understanding of the lens being applied to create knowledge (Rose, 1997). Indeed Rose (1997) argued that this is an improbable task, partly attributable to a lack of awareness of how the configuration of influencing factors impinge on one's understanding. This section in being reflective about the arguments of the influential figures shaping this research, Somerville and Massey, aims to avoid claims about 'neutral knowledge' which Rose (1997) argued is essential for a critical geographical study. However, having clearly established the need for such an approach, Rose (1997) acknowledged herself that such a quest to establish positionalities is unlikely to be successful partly attributable in this scenario to different contexts. At the same time she raised awareness that identities would not occur in

isolation but would be constructed through their social milieu (Rose, 1997).

Nevertheless, this section aims to set out to explore this avenue to try to overcome producing generalised statements.

The positionalities of the two academics have influenced the unique way in which they each approach the study of place. Both view their worlds through their feminist lens, which have developed in different ways from their diverse located experiences.

Somerville's (1999) feminism has developed from her work with Aboriginal and Torres Strait Islander women in the Australian desert. Their alternative sense of being in place added to her developing interest in ecology and Aboriginal and Torres Strait Islander relationship with the land (Somerville, 2010). While Massey's feminism evolved from her position as a UK based Geography academic, who in the 1970s took a feminist stance in wanting to increase the profile of women in all walks of life and societies across the world (Massey et al., 2009). This line of thinking (Massey et al., 2009) was formed in relation to her socialist political thinking which, in turn, was an integral part of her theoretical engagement with place.

3.2i Somerville's embodied approach to place

Somerville's (1999) postcolonial perspective has influenced her thinking about place especially living in a landscape steeped in Aboriginal and Torres Strait Islander stories. Her awareness of these and the unresolved issues relating to land ownership have increased through her research relating to place (Somerville, 1999). The enormity of past maltreatment became evident through her work with Tony Perkins, a Garby Elder from Corindi Beach in New South Wales from whom she learnt about the massacre at Red Rock (Somerville and Perkins, 2010). It is across this cultural divide between white settlers as colonisers and indigenous community place knowledge that Somerville (1999, Somerville et al., 2010) has developed her place knowledge. She is aware of her background as a third generation settler of Celtic descent searching for a deeper sense of connection with the only home country she has known and yet aware of historical links with the loss of an indigenous way of life (Somerville, 1999). She has worked tirelessly to foster links between the communities.

In an interview with Fiona Probyn (Probyn and Somerville, 2004) Somerville explained her awareness of issues relating to holding postcolonial and feminist viewpoints, when many Aboriginal and Torres Strait Islanders refused to interact with white western feminists

because of their unwillingness to engage with racial issues. Here Somerville has aligned herself to a broader view of feminism that encompassed a diversity of feminist thinking:

I am aware of the debates around feminism and Aboriginality, and that some Indigenous women have rejected feminism on all sorts of grounds, including that white feminists have erased race issues from their agenda. My intellectual thought has been fashioned in feminist debates around the question of difference, to which I believe feminism has contributed more than any other theoretical framework (Probyn and Somerville, 2004, p.57)

Somerville felt feminism was significant as an ideology because of its ability to search for difference and believed its evolution has allowed a variety of avenues of research to exist under its broad heading. However, Somerville admitted to coming to feminism later through her work with Aboriginal women in the desert and in the process found race and gender to be interwoven (Probyn et al., 2004).

From this respect these issues are for Somerville interrelated in her writing of *Body/Landscape Journals* (1999): "I think the various theoretical frameworks and methodologies I have used have given rise to the approach in *B/L J*. I called it a postcolonial practice of writing because it engages with issues of race, gender, body and place, and the deconstruction of binaries" (Probyn and Somerville, 2004, p.57).

Here Somerville explained how the lens through which she viewed place is influenced by multiple factors which are an integral part of how Somerville has engaged with her study of place, especially her focus on a sensory embodied connection (Somerville, 2010). This was evident from negotiating how to communicate with traditional Aboriginal and Torres Strait Islander Pintubi women, west of Alice Springs, who had not learnt English (Somerville, 1999). Somerville and the Pintubi women created a relationship through their shared presence in a place, with the use of dance to overcome communication difficulties from using a different language (Somerville, 1999). The meeting with an oral culture acted as a catalyst to find an alternative means of communication, one which went beyond language - written or spoken - and required Somerville (1999) to be respectful of a different way of life. The women's lives, Somerville (1999) came to realise, gained strength from being in their place. This idea of border crossing, between different cultures, has become an integral part of Somerville's (1999, 2013a, Somerville and Perkins, 2010) work.

From these and other similar experiences Somerville (1999) developed a sense of embodied sensory place awareness and knowledge. Her understanding of the significance of using senses, especially sound, to know a place in a different way increased from her time with Nganyinytja, a Pitjantjatjara woman from south west of Alice Springs (Somerville, 1999). From Nganyinytja, who refused to learn English, she learnt through an interpreter the importance of knowledge coming from the ground (Somerville, 1999). For Nganyinytja, language and gestures gave her a connection to her place, through layers of knowledge from the rocks to shared stories (Somerville, 1999). Listening allowed Somerville to connect with surrounding elements (Somerville, 1999). These experiences further increased Somerville's (1999) postcolonial understanding of the significance of land, with its potential to share cross-cultural knowledge through song and dance.

Negotiating the space between different cultures was termed "the zone of contestation" by Somerville (2010, p.342), leading her to explore different means of communicating these experiences. This was apparent in her work with the descendants of Mary Jane Cain, known as 'The Queen of the Mission' because she ran the Burrabeedee mission, whose place experience, crossed the period of pre and postcolonial settlement (Somerville, 1999). Somerville (1999) surmised the title may have emerged from queen being the nearest equivalent to "meengha" (p.98) meaning a female with significant power which was reflected in Cain running a mission. This demonstrated the importance of contextual knowledge for explaining anomalies in the colonial landscape. Her understanding of the story of this place and its people was helped by having a site visit to the burial ground of the Queen, to gain an insight into the place (Somerville, 1999). The visit supported Somerville (1999) to conceptualise the story through developing a palimpsest of information from Emily, her granddaughter, including their shared visit to her burial ground. This research explored the space between the two cultures, one which ended with a move for Aboriginal and Torres Strait Islanders to become assimilated into a white settler town community in the 1950s (Somerville, 1999). The challenge of how to communicate place information across and between places and cultures was apparent throughout Somerville's (1999) work although a site visit helped in constructing and interpreting layers of information.

Other methods of recording place information included photography which provided an artefact to mull over the meaning of chosen images (Somerville, 1999). Somerville (1999) included photographs of Aboriginal and Torres Strait Islander women dancing to remind

her of her embodied spatial experiences. Other methods included recording Nganyinytja's stories and subsequently managing to translate a few words. From these insights Somerville (1999) started to appreciate the layered nature of traditional knowledge which she likened to a palimpsest through the way in which each layer was partially seen through each incremental layer.

Somerville's (2010) research and poststructural thinking left her feeling something was missing from traditional research into place which, in her view separated the subject and object and in the process made it difficult to express deeper place relations (Somerville, 2010). This resulted in a questioning of the western binary thinking which separated mind and body (Somerville, 2010). In response, Somerville (1999) positioned her body at the centre of her place research. In so doing she was able to integrate the body into her place stories and in the process overcome the constraints of western binary thinking. Somerville (1999) developed an embodied approach to studying place to gain a more holistic insightful place understanding, one that allowed an embodied connected view of the mind and body in place (Somerville, 1999). This trajectory led to Somerville (2010, 2013a) to argue for a different way of learning about place, in its multiple human and nonhuman formats, through having an embodied sensory experience of being in place.

3.2ii Massey and place

Massey (1994) questioned gendered thinking around place/space, where the former is perceived to be feminine and the latter masculine. This view of gendered space included dual thinking around the local /global, based on the assumption that women live more local lives than men and are situated in local places (Massey, 1994). Instead Massey argued for a different story: "[W]hat we need, it seems to me, is a global sense of the local, a global sense of place" (Massey, 1994, p.156). In this statement Massey is arguing for a wider view of place, one that recognised grounded local influences which have contributed to the global perspective. This takes the discussion beyond gender. In this discussion, Massey (2007) fought against the local being portrayed as a victim of the global. Such a view would allow for the incorporation of more recent trends based on improvements in communication which have led to time / space compression, where technology has allowed communication to move across space and time more rapidly, so reducing their separation. "Time-space-compression refers to movement and communication across space, to the geographical stretching-out of social relations, and to

our experience of all this” (Massey, 1994, p.147). Here Massey (1994) in integrating people into her interpretation of time-space compression has demonstrated how a sense of place is transformed from being inward to outward looking.

Relational thinking provided Massey (2014) with a route into examining the interrelated nature of places on planet earth. In taking a planetary view of the study of place, Massey (2014) introduced the idea of the implications of our actions in local places having global repercussions. Massey (2014) argued the case for teaching a global view of place as a means of introducing young people to the environmental consequences of their actions and choices made in local places. A study of place, where place is interpreted at different scales from the local to the planetary, has relevance for contemporary geography which incorporates the study of past and present movement of goods, people and culture (Massey, 2014). Nevertheless, she felt there is a need for greater emphasis to be given to the local origin of current issues facing our planet earth, itself a place, for which we are all responsible (Massey, 2014). This she suggested would lead to an increased awareness of our actions in local places: “[H]ence “the global” can be at the forefront of understanding this (dynamic) interplay, through its rigorous grasp of space and place” (Massey, 2014, p.39). For Massey (2014) this happened while she was at school. This suggests school geography could foster our planetary awareness through increasing the study of our local places and our actions within them.

At the same time, place is related to identity (Massey, 1994). Massey (1994) related the study of a place’s identity to personal identities, with both considered to be multiple. This is apparent through their formation of links with places across the globe, making place important as the point where these links occur (Massey, 2004). This is part of Massey’s argument for an interrelated politics which considers those beyond the immediate vicinity of a place (Massey, 2004).

Another area of contention for Massey (1994) was the way in which place is often perceived to be bounded while space is left open to flows. Here Massey (1994) related boundedness to the male need for protecting the security of a place, which was tied into male identity. In addition, a bounded view of place can be linked to modernity’s linear path to development with some places further along the line than others (Massey, 2005a). This path is temporal and based upon all places following a similar West European route (Massey, 2005a). In this instance Massey (2005a) likened this view of

development to translating the world's geography into its history which is continued in the next section.

In a similar vein to Somerville's cultural border crossing, Massey (Massey et al., 2009) felt there was scope for geography to unite the human and natural sciences. After all she maintained that 'hard' science is still constructed within social conditions where 'noise' is removed from its production (Massey, 1999). She argued a case for increasing the status of more complex interrelationships in an unbounded space where place could not be static and the future was open (Massey, 1999). This dynamic view of place where space and time play an equal role in its conception will be examined further in the next section.

3.3 Place, spatial thinking and storying

The work of Somerville and Massey have both signposted this research into a place with a class of Year 9 secondary Geography students. Both academics have provided insightful views of the elusive concept and are united in their condemnation of binary thinking. They share the ability to communicate understanding about a place through stories while bringing into question the mode in which information should be communicated (Massey, 2005a, Somerville, 2013). This is particularly evident in spatial thinking which in Massey's (2005a) case related to the local/global and in Somerville's (2010) to the division between western and indigenous knowledge. These ideas alongside their growing awareness of the non-human perspective will be developed in this section along with its potential contribution to the teaching of place.

Both academics shared a fascination with the ability of a story to convey meaning. Stories have been equated with narratives in Massey's (2005a) writing and established as a means of communicating multiple trajectories about a place's past. For Massey, a story provides an opportunity to contemplate different futures through including a variety of potential stories: "[B]y 'trajectory' and 'story' I mean simply to emphasise the process of change in a phenomenon. The terms are thus temporal in their stress, though, I would argue, their necessary spatiality (the positioning in relation to other trajectories or stories, for instance) is inseparable from and intrinsic to their character" (Massey, 2005a, p.12). This conception of a story allowed for numerous unfolding stories of simultaneous events proceeding independently, often following different time scales. Consequently, story is understood by Massey as a means of communicating the evolution of objects and has a dynamic element rather than being an interpreted past historical event. However, these

multiple trajectories in Massey's (2005a) undertaking happen within a lived space, one that has engaged with time. Here Massey is critical of past attempts to portray geography as a "historical narrative" (Massey, 2005a, p.37). Consequently, her interpretation of trajectory, is one that incorporated a variety of movements each with a level of individual autonomy, yet followed unalterable paths (Massey, 2005a). In adopting such an interpretation of stories, Massey (2005a) brings into question modernity's assumption of one story, with countries following one line of development. Instead she is offering a more open interpretation, with different stories converging in a place, which all contribute to its unique identity (Massey, 2005a). This interpretation of story is commensurate with Massey's (2005a) understanding of place as an event, one that acknowledges the coming together of these diverse trajectories and will indeed need negotiation.

It is in trying to interpret these layers of happenings that converge on a place, which continued its evolutionary path between events, that are at the same time woven together (Massey, 2005a) to provide a rich place story that will require mediation.

This is where representation is brought into the discussion, in considering how to convey these multiple trajectories, without creating a historical legacy. It is here that geography has its traditional means of communication which Massey (2005a) used to convey the narrative about events that have evolved over time in the Lake District. These included the use of a cross-section through the geology of the area, geological maps which show its evolutionary passage through geological time and its relative changing global locations. This would confirm Massey's (2005a) definition of: "[P]laces not as points or areas on maps, but as integrations of space and time; as *spatio-temporal events*" (Massey, 2005a, p.130). Such an interpretation of place incorporated the weaving together of different narratives, which are unfolding at different rates. This included the human and nonhuman world, and captured a snapshot of their evolution, at one point in time. At the same time Massey (2005a) noted the omission when discussing the cultural and geologic evolution of a place of the movements of the natural world. The interpretation of these heterogeneous paths, for Massey (2005a) constitute the geography of the place:

[R]ather, what is special about place is precisely that throwntogetherness, the unavoidable challenge of negotiating a here-and-now (itself drawing on a history and a geography of thens and theres); and a negotiation which must take place within and between both human and nonhuman. This in no way denies a sense of wonder: what could be more stirring than walking the high

fells in the knowledge of the history and geography that has made them here today (Massey, 2005a, p.140).

To study such a geography of place, as described by Massey, would provide a window into its multifarious elements and at the same time ensure their evolution is contextualised. The process of dissecting past events that have evolved within a place, whose location may have changed over geologic time, would be an intricate task. At the same time, it has the potential to bring together human and physical geography, with their component parts, all of which have their own narratives which have evolved at different rates. This interpretation of a place offered a different inroad to study a place and tell a more inclusive story. Massey suggested it was important to ensure that all the happenings are not perceived as predetermined, there needs to be an air of uncertainty for example what will happen with the story of the hill farmer regarding how much longer can the farmer continue farming in a challenging environment dependent on subsidies? Moreover, she suggested moving backwards and forwards between past and present happenings in a place, to note their trajectories do not all follow the time span. One example of movement used by Massey is the continuing uplift of the Lake District mountains which will be moving at a slower pace than the possible turnover of types of goods sold in local shops (Massey, 2005a). The idea of movement extended to the nonhuman natural world, where bird and wildlife follow their own migratory patterns, so adding to the dynamic event of place. Such a view of place would Massey (2006) felt offset images of 'parochialism.'

At the same time Massey (2005a) offered a suggestion of how to connect with a place. This connection could be made through the act of walking. Both activities, the means of investigation and walking to engage with a place, provide the means to affectively and cerebrally engage with a place. To this Massey (2005a) added the need at the same time to engage with the politics of a place, to establish how all the different facets manage to get along together.

Walking signifies throughout Massey's writing as evident in her narrative about the unique nature of the Lake District fells, as a means of connecting with the landscape and observing the happenings in the surrounding place. An interest in walking in open highland areas was one of the reasons Massey wore hiking boots for an interview at Glasgow University, as she was about to travel to Sutherland for three days of walking and exploring the area (Massey et al., 2009). She felt it gave her an opportunity to engage with the local geology

as well as a means of uniting studies of human and physical geography (Massey et al., 2009).

Massey is not alone in her suggestion of how to connect with place through walking. The work of Wylie (2005) is particularly interesting in his narrative about his personal engagement with the landscape he passed through on while his walk along the South West Coast Path. Along the way Wylie (2005) developed affective place relations reflective of Somerville's (1999) discussion about how the use of photography, connected the subject with the object, the landscape. In Wylie's (2005) discourse, he demonstrated how walking connected him with the landscape through his senses, especially his visual ability to appreciate the colours of his surroundings and the experience of moving over different haptic surfaces. In this context affect is interpreted as: "[A]n affect is an intensity, a field perhaps of awe, irritation or serenity, which exceeds, enters into, and ranges over the sensations and emotions of a subject who feels" (Wylie, 2005, p.236). Intermittently, Wylie (2005) paused along his route to appreciate aspects of features, which were mainly natural, for example tree branches.

Urban walking can equally well be engaged with the senses as Wylie's (2005) rural coastal path walking. This is apparent from the work of Middleton (2010) who made a case for the embodied benefits of walking on the grounds that it is sustainable while at the same time connects the mind and body. The act of walking was linked to creating a sense of place. Middleton (2010) explored the opportunity to carry out in-depth walking interviews and encouraged the participants in her research in inner London to keep a walking photo diary. However, the activities recorded were somewhat mechanistic, in the nature of the spatial accounts: "[I]n other words, they spatialised their experience of time on foot by producing personalised time-space budgets in their diaries" (Middleton, 2010, p.580). However, they engaged with the concept of time and monitoring its use, although Middleton herself raised the question of whether these movements are as linear as they appeared. Nevertheless, the walking experiences were found to be multi-sensory in their engagement with a place, including relating to its atmosphere (Middleton, 2010). While Butler and Miller (2005) and Butler (2006) related sound and art to walking through Graeme Miller's Linked project which used audio transmitters mounted on lamp posts to share oral historical stories about people who used to live along the route taken by the M11 through London.

When considering a place's identity, Massey (2007) argued for a relational view. This was evidenced through the study of London (Massey, 2007) which provided an example of a locally situated powerful city with global connections. This position, Massey (2007) felt should not come without responsibilities which emanated from being a capital city and an international city of standing, while at the same time there is a recognition of inequalities within the city and country it governed. Here Massey (2007) argued for a politics of place, one that extended beyond its physical boundaries. At the same time Massey (2007) recognised some of London's present standing on the international stage, stemmed from its past colonial empire, so she felt we should not absolve ourselves from our past activities. Massey (2005a) was adamant the local should not be perceived as a victim of the global, especially as the global exists, in local places. However international businesses can influence the unfolding identity of a place.

At the same time Massey (2007) suggested local places take a more active role in the decision-making about the sourcing of products they consume, which in the process of making such decisions the locals are making a clear statement about the ethical position of their local place. This was perceived to provide a means for taking responsibility, which could be extended to how we act within a place, in terms of our carbon emissions (Massey, 2007). These could be transposed into decisions about recycling, transport and shopping, providing an example of local environmental decisions that have global repercussions. Massey's view of place is a dynamic one: "[P]laces are meeting-places of multiple trajectories whose material co-presence has to be negotiated" (Massey, 2007, p.209). Here Massey has provided an engaged means of studying place, one that allows for reflection, about how individuals can play a part in shaping the future geography of a place. This Massey (2005a) acknowledged will require political decision making, and in the process possible consternation but at the end of the day provides a means of shaping a place's identity. The question that Massey (2005a) felt should be on the agenda is: "what does this place stand for?" (Massey, 2005a, p.209). This does provide a different way of engaging with the study of a place. To do so, would be political, in engaging with the geography of inequality and the responsibility for its occurrence and continuity (Massey, 2007). The use of story can provide an overview of the spatial happenings in a place.

Somerville (2010) answered Massey's question about what a place stands for in the following quotation and in the process demonstrated why it forms the heart of this conceptual framework: "[P]lace is productive as a framework because it creates a space

between grounded physical reality and the metaphysical space of representation.” (Somerville, 2010, p.330). Here it is evident for Somerville’s research into place, how the concept provided between a physical landscape which stimulated reflective thinking about different viewpoints concerning environmental issues. The question of how to communicate this deeper place connection is for Somerville (1999), influenced by her work with Aboriginal and Torres Strait Islanders, in being able to talk a place into being. She felt language formed the core of how to communicate the connection with the landscape (Somerville, 2013a). However, it is a broad interpretation of language and story that is used by Somerville (2010), one that supports a multidisciplinary study of place. This was evident in her telling the story of Ingelba, a former Aboriginal and Torres Strait Islander mission:

At Ingelba, place storytelling had many dimensions. It had many modes of representation – audio recordings, written transcripts, photos, drawings, and maps – which were assembled and re-assembled to produce different forms. The concept of story can be usefully enlarged to embrace the expressions of visual artists, sculptors, and poets, as well as scientists, policy makers and agriculturalists. Each discipline and artistic modality has its own forms and genres of place stories (Somerville, 2010, p.336).

Storytelling is interpreted as a genre for communication. This supported the ability to tell the story about a place through a variety of lenses. At the same time Somerville has situated storytelling as a vital means of connecting individuals with information about a place. The breadth of its interpretation has meant it can be used to support and extend information that cannot easily be expressed through words. Having such a rich range of means of communication is reflected in Somerville’s (2010) cultural work with indigenous and non-indigenous communities, who between them, have used all the above means to express their information about the happenings in a place. The question of how stories are shared is integral to Somerville’s place pedagogy and her broad interpretation of stories. Consequently, to support young people in telling place stories in such a way that allowed for having experienced a place in a sensory way led to exploring a variety of representational genres.

There was a need to develop a means to support young people to tell their place stories in a different way, one that would allow for the embodied sensory way in which they had experienced a place. This required a means of representation that would not restrict young people’s thinking and would allow them to make connections in a different way. This became evident from work completed by primary school pupils who had experienced a day

visiting the Morwell River wetlands (Somerville, 2015). In follow-up activities one class was given lined paper on which they produced narrative and drawings while another class was given plain A3 sheets (Somerville, 2015). The second group produced more creative original pieces of work evident through the way in which they represented and arranged their information with links between the various elements (Somerville, 2015). These Somerville (2015) termed 'place learning maps' and enabled the pupils to employ colour, drawing and design features like spatial proximity to link their information and support their messages. Somerville (2015) felt their format was reflective of Aboriginal and Torres Strait Islanders place knowledge, through the way in which they enabled students to integrate their bodily place understanding which did not decouple mind from body or nature from culture. This step was supportive of the variety of ways in which the pupils individually connected with their study of the wetlands. These place learning maps provided a stimulus for exploring other modal means to support students in representing their place findings.

It is Somerville's use of stories and storytelling that has the potential to be transformative, especially through fostering the link between place and pedagogy. Here Somerville (2010) wants to expand the capacity of young people to tell alternative place stories, ones that foster the ability to live differently in a place. To do so would require a means of critically engaging with a place. To achieve this Somerville (2010) acknowledged how Gruenewald's (2003b) critical place conscious education helped her to connect place and pedagogy, through examining how places operate and our lives are interwoven with our local places. The movement questioned an education based on testing and instead argued for providing an education that prepared young people to live in their local place (Gruenewald, 2003b). Such a life, Gruenewald (2003b) felt needed to listen to the workings of their local place including its ecological well-being and acknowledged humans' role as place makers. There are similarities with Somerville (2010) in its suggestion to develop sensory place connections with local culture and education which was felt to be missing from western thinking (Gruenewald, 2003b). Somerville (2010) was influenced by Gruenewald's (2003a) dual concepts of 'decolonisation' and 're-inhabitation'. Decolonisation involved recognising negative factors affecting a place and its inhabitants like exploitation (Gruenewald, 2003a). The corollary was re-inhabitation which involved considering alternative more positive sustainable ways of living in a place. The aim of such an education was to connect young people to their local places, through place experiences (Gruenewald,

2003a). These ideas were integrated with Somerville's feminist poststructural, postcolonial and Aboriginal and Torres Strait Islander philosophies to formulate her alternative place pedagogy.

Somerville (2010) used having a sensory embodied experience as a means for achieving a deeper place connection. It is at this point that Somerville (2010) became aware that the feminist post-structural means of communication, language, on its own is not adequate to convey such a connection. Instead Somerville (2010) used the body to create a different way of being in a place, one that has the potential to bring the person and the place closer together and create a deeper relationship. For Somerville (2010) the ability to learn from being in a place came from having a whole sensory bodily connection to it. This meant learning to listen to hear, look to see and smell to identify individual features. Such an approach led to an ability to observe changes in a place, all of which ensured the viewer became absorbed in what was happening around them. For Somerville (2013a) having such a sensory bodily presence left a legacy of body/place memories. Associated with these memories was the collection of local seasonal produce and the question of how to pass on this knowledge.

The question of representation led Somerville (2013a) to consider how to link body/place insights with academic knowledge, again confronting border crossing between two different cultures. For Somerville (1999) this personal passage has been achieved through writing, as evident in her body/place journal writing. However, there is the dilemma of how to pass on indigenous oral knowledge which resulted in her being involved in pioneer work with Gumbaynggirr people on the mid north coast of New South Wales (Somerville and Perkins, 2010). They created a technique which they termed "deep mapping" where past storylines are linked to site-specific traditional stories of the ancestors where the Gumbaynggirr used to live (Somerville et al., 2010). "The story, we produce here follows the same processes as deep mapping, beginning with the present and moving back into the deep past. The past is always partially visible in the present, it is never completely erased." (Somerville et al., 2010, p,164). A palimpsest of information. This became more intricate when it involved different clans, each with their own languages and traditions (Somerville et al., 2010). These encounters required a need to engage with crossing binary thinking between nature/culture, a key feature of Somerville's (Somerville, 2010) work.

While Massey (2005a) questioned from what perspective the story is being told and is critical of a place's story being told from a western viewpoint, especially one that concentrates on a white male heterosexual narrative. Consequently, this does raise awareness when telling the story of a place, to bring in all the different elements and configurations together. Indeed Massey (2005a) achieved this when describing her train journey to work from London to Milton Keynes, an example of space time travel:

At either end of your journey, then, a town or city (a place) which itself consists of a bundle of trajectories. And likewise, with the places in between. You are, on that train, travelling not across space-as-a-surface (this would be the landscape – and anyway what to humans may be a surface is not so to the rain and may not be so either to a million micro-bugs which weave their way through it – this 'surface' is a specific relational production), you are travelling *across trajectories*. That tree which blows now in the wind out there beyond the train window was once an acorn on another tree, will one day hence be gone. That field of yellow oil-seed flower, product of fertiliser and European subsidy, is a moment – significant but passing – in a chain of industrialised agricultural production (Massey, 2005a, p.119, italics in the original).

Here Massey is capturing something of the dynamic nature of a place, which is composed of a multitude of happenings which are interrelated but nevertheless spatially unique in their configuration. Another feature of Massey's conception of story is that it is in a continually state of unfolding, one that is never finished. There is a temporal tone to the passage, the later evident in the allusion to the life cycle of a tree and a living crop. The subsidy is not for the crop, which in the UK is primarily used as a food crop to produce margarines and spreads. In fact in 2016/2017 it is estimated by the Department for Transport that no oil seed rape grown in the UK was used to produce bio-diesel (Crops Grown For Bioenergy in England and the UK: 2016 – DEFRA publication, 6.12.2017 – alison.wray@defra.gsi.gov.uk) demonstrating the changing nature of the countryside. This does confirm Massey's (2005a) definition of place as a spatio-temporal event at one point in time. Nevertheless, the decision as to which crop is grown is influenced by a number of factors that have their origins beyond the local place.

The narrative with its connection to the European Union (EU) is an example of Massey's (2007) concept of the global in the local, through relational politics. Although the way in which the EU is integrated into the discussion suggests it does have agency over the local, through influencing the farmer's decision as to which crop to plant. This seems to make the decision to plant the oil seed rape crop appear as if the local needs defending against

this larger influence. The argument could be viewed from a different perspective as suggested by Massey (2007) with the global being created in a local place. However, Massey (2005a) considered the local does indeed have agency in this scenario, if only in taking responsibility for its actions, which do have global consequences. Here Massey (2005a) is making a clear case for the relational consequences of our actions, with the local forming an integral part of the global. In the discussion Massey (2007) used her position as a feminist socialist geographer to argue for a geography of responsibility which questions the nature of a place's relationship with other places. However, through examining place in relation to its wider political influence, it offset a parochial view of a place (Massey, 2007). On reflection Massey (2006) agreed this view of place based on social relations had ignored nature. If nature is introduced to the study of place, it has multiple elements, which have their own trajectories following different temporal paths (Massey, 2005a). This is evident in the previous extract where "micro-bugs weave their way through it" (Massey, 200a, p.119) following their own temporal trajectories across the landscape. All of which contribute to the understanding of a dynamic conception of place. Another argument Massey (2006) provided for supporting an outward conception of place is its avoidance of focusing solely on its local features and developing an inward-looking romantic view of a place. This open view of place, with its multiple identities, which are continuing evolving is central to Massey's (1994) conception of place.

In adopting a post-structural view Massey (2005a) recognised the need to contemplate how the different trajectories converged on a place. This she acknowledged would require the ability to thinking concurrently (Massey, 2005a) and work between different stories progressing along varying time frames. The inclusion of geological maps showing the continental drift of the Lake District helped to explain its current geological configuration. Here the visual use of maps assists the reader to envisage the processes and to understand the challenges that continue to face farmers making a living in a remote upland area. Consequently, the inclusion of multi-modal means of presenting data does help the reader to understand and negotiate the varying stories happening within a place.

Both Massey and Somerville are united in their dislike of binary thinking; this is evident in the previous discussion of Massey's idea of the relational view of the local and global. For Somerville (Somerville et al., 2015) it is particularly evident in her conception of the dualism of nature/culture which Somerville et al., (2015) conflate as "natureculture"

(p.19). This Somerville et al., (2015) felt was evident in an Australian context where Aboriginal and Torres Strait Islanders represent their place experiences through their embodied experiences of being in place: “[I]t is place learning that derives from a deep embodied intimacy. This place learning gives rise to a different sense of self, an understanding of self-becoming-other in the space between the self and the natural world, composed of humans, and non-human others, animate and inanimate, animals and plants, weather, rocks, trees” (Somerville and Perkins, 2010, p.20). Here Somerville through her work with Aboriginal and Torres Strait Islanders including Tony Perkins, a Garby Elder of Corindi Beach in New South Wales, learnt to know places in a different way. She termed the way she learnt to think through being in place as “oral place story” (Somerville et al., 2010, p.19): “[O]ral place stories tell us about the relationship between places and people in the present, layered through deep time. In these times of rapid environmental loss, it is now more urgent than ever that we listen to these stories about how to learn and inhabit our places differently” (Somerville et al., 2010, pp.19-20). The way Somerville engaged with these different place stories was by learning about them through her whole body. Such place learning came through filtering the happenings around her through her sensory body and in the process came to know herself in a different way (Somerville et al., 2010). This learning could occur through attentively walking along a beach (Somerville et al., 2010). Somerville et al., (2015) joined environmentalists in their belief that a different approach, one that could introduce a sustainable place education required an alternative ontology, or ‘way of being’ in a place and way of understanding about a place.

An ontological change which required a re-think of how we live our lives in a place would impact upon our local places. This would contribute towards students starting to realise they have a role in shaping places, now and in the future. Ontology is understood to concern our view of the nature of our social world which is expanded by Bryman (2012) who deliberated over the extent to which it is external to social actors or to what extent they have a role in shaping it. This research is sympathetic with a constructivist view that social actors have a role in shaping their lives within a place.

A constructivist ontological position would reflect Somerville’s (2010) search for a different way of engaging young people in how to get to know their local places and live out their lives more sustainably: “I have proposed an ontology of becoming-other as an extension of feminist poststructural work about the subject in process. This becoming-

other is a relational ontology that includes the non-human and inanimate 'flesh of the world' as well as human others" (Somerville, 2010, p.342). For this ontology, Somerville is suggesting a connection with the non-human animal world as well as the non-living natural world.

Furthermore Somerville (2015) linked the need to find a different way of living on our planet to issues relating to the Anthropocene, including climate change and environmental destruction. Such a view would be compatible with Bryman's (2012) interpretation of social ontology. In her research with children Somerville (2015) found that when they became immersed in the world it deepened their understanding of nature. This highlighted the ontological implications of the students adopting an embodied place experience which is fundamental to Somerville's (2010) approach to the study of place. This is endorsed by Hamilton et al.'s (2013) recognition of the possibility for numerous ontological meanings of "reality" (p.26) to emerge from examining historical and societal settings. A key factor they have identified in this epistemological process is the significance of individual interpretation of knowledge which is recognised as being socially created (Hamilton et al., 2013). It has implications for supporting the students to be able to construct their knowledge about a place through being able to discuss their ideas with their peers. Consequently, this strengthens the argument for enabling students to be able to work in groups which will be developed in the methodology.

At the same time a constructivist ontological position recognised understanding is in a continual state of evolution from the on-going activities of social actors (Bryman, 2012). Such a dynamic view would be commensurate with Massey's (2005a) interpretation of place being in a continual state of creation and evolution. Consequently, constructivism does provide an exciting ontological lens from which to view and engage with the study of place. This indicates constructivism as explained by Hamilton et al., (2013) in allowing for numerous meanings which have their roots in a historical and social setting, underpin the theoretical stance of the study which has implications for the methodology.

The search for a different ontology involved an alternative epistemology. Here epistemology is interpreted through Somerville et al.'s (2015) lens of how we know about a place. Moreover, in her more recent work Somerville et al., (2015) used a combined onto-epistemology which supported having an embodied experience in how the

information was represented. This was evident in the place learning maps discussed earlier in this section as an example of a different way of learning about a place. Such an onto-epistemology would support students having an embodied place experience while iteratively reflecting upon their findings. This an experience is reiterated in Crotty's understanding of epistemology: "[M]eaning is not discovered but constructed. In this understanding of knowledge, it is clear that different people may construct meaning in different ways, even in relation to the same phenomenon. Isn't this precisely what we find when we move from one era to another or from one culture to another" (Crotty, 1998, pp.8-9).

In this discussion Crotty (1998) recognised the different ways in which people construct knowledge and therefore how they represent it. According to this narrative the students could and would need support to represent their information in a variety of ways. This would endorse Somerville's aim of encouraging young people to get to know their local places in a different way. At the same time, Crotty (1998) is supportive of evolving epistemologies rather like a palimpsest, which would be reminiscent of Somerville's understanding of Aboriginal and Torres Strait Islander storylines. A constructivist theoretical stance includes epistemological inferences that knowledge is socially constructed (Hamilton et al., 2013) which has implications for students to be able to work with one another.

Such an approach has been adopted by Somerville (2015) in her place onto-epistemology in which she explained how having a tangible location for studying place, provides support for developing children's thinking about sustainability: "[P]lace is thus pedagogical in relation to sustainability, it is the vital activating ingredient between the child as an ontological being in the world and their sustainability education as epistemological endeavour" (Somerville, 2015, p.178). In this narrative Somerville acknowledged place is particularly pedagogical in relation to considering its sustainability, which she subsequently evidenced through work with the local primary school children who were going to monitor the ecological rehabilitation of a partly manmade wetlands site in the Latrobe Valley. This was evident in Somerville's (2015) involvement with the Morewell River wetlands programme. However, during the project Somerville (2015) recognised it involved the pupils in a different ontological way of being in the place and a different epistemology in discovering how a place could become more sustainable. Consequently, through their involvement the children developed a different onto-

epistemological experience (Somerville, 2015). This happened through the way in which they had an embodied engagement with the place and the subsequent way in which they represented their findings on blank A3 sheets of plain paper (Somerville, 2015). This gave the pupils a fresh way of learning about a place (Somerville, 2015). It demonstrated how Somerville's different way of learning about place through having an embodied place experience and Massey's (2005a, 2006) previous argument for a dynamic sense of place, offer a fresh way of engaging with the study of place.

Reflections over the way in which Aboriginal and Torres Strait Islanders engaged with place contributed to Somerville (2010) re-thinking her interpretation of post-structural feminism, where language was traditionally the key means of communication. Moreover they contributed to Somerville's (2010) use of the sensory body as a means of knowing a place in a different way. To achieve this Somerville (2010) suggested a different onto-epistemology, one that is related to being in relation to one's surroundings. This was created through having a relationship with the bodily presence of human and nonhuman objects (Somerville, 2010).

Somerville (2013a) noticed thinking about the environment has changed in recent years, with a recognition of the significance of local ecological knowledge. Here Somerville (2013a) particularly remarked upon the work of Pretty et al., (2009) who recognised the links between biodiversity and cultural diversity. The scientists perceived support of separately viewing the terms was related to the desire to dominate nature (Pretty et al., 2009). This is supportive of Somerville's (2013a) dislike of binary thinking, especially around terms like nature / culture. Moreover Pretty et al., (2009) who perceived if there was support for cultural and ecological diversity it could increase human and natural resilience in our changing environment and foster a sustainable future. The scientists recognised the significance of culture in influencing people's relationships with their surroundings (Pretty et al., 2009). The work of Pretty (2004) has identified how engaging with nature, whether through vicarious experiences or through being outside, linked to mental health. Walking is linked to well-being through its facility to engage with nature, besides offering an opportunity for exercise (Pretty, 2004). In addition, being near nature has been linked to less aggressive behaviour and improved cognitive thinking in children (Pretty, 2004). Health benefits have been found from having access to views of nature or sounds of nature (Pretty, 2004). All these benefits have wider implications for

contributing to students' well-being and ability to engage with their work, which could be compounded if nature related.

There is a need to maintain nature connections as Pilgrim et al., (2007) noted reduced knowledge about species in less traditional economies where there is less connection with nature resulting in decreased care for the environment. Reduced ecological knowledge is recognised as a threat to our future global conservation (Pilgrim et al., 2007). Traditionally nature and culture have been interwoven with knowledge passed through generations by oral narratives or through stories as a means of knowing how to value and care for ecology (Pilgrim et al., 2007).

Both academics (Massey, 2005a, 2005b and Somerville, 2013a) share a respect for the nonhuman other and the need for its inclusion in the study of a place, to contribute towards providing a deeper place connection. This perspective is not an integral part of the secondary geography curriculum and Somerville et al. (2015) recognised it is not usually evident in the busy primary curriculum. However, Somerville (2015) cited research by Kalvaitis and Monhardt (2012) found, older primary school pupils appeared to become more distant from the nonhuman compared with younger pupils. On the other hand, the Aboriginal and Torres Islander concept of being given a *Mulgury*, a living object, at birth with the expectation that it is their duty to look after the species for the rest of their lives (Somerville, 2015). This responsibility requires individuals to familiarise themselves with everything that is required to support the plant or animal (Somerville, 2013a). Consequently, an individual's identity and ontology are integral with their *Mulgury* and country. Years are spent learning about the needs of the *Mulgury* to ensure its survival. Such a perspective provides a different way of engaging with a place.

Massey (2005b) questioned what alternative insights could become apparent from a stronger nonhuman presence when examining a place's history. There is a growing desire to raise the profile of a posthuman approach with increasing concern about ecological damage and the future sustainability of the planet: "[P]osthuman approaches aim to de-centre the human being in order to envisage the human as co-constituted with the more-than-human world" (Somerville et al., 2015, p.7). An examination of the potential of this approach is beyond this research, although there are nascent references to the nonhuman, which have emerged from the students' own way of viewing a place. Nevertheless, there is scope for an examination of all aspects of the environment,

including the human and the nonhuman, especially when considering a place's future sustainability. The concept of the more-than-human when studying place, would encourage a closer examination of all aspects of a place, human and non-human and their role within it.

However, Massey (2005a) has recognised the ecological element of the study of place is often missing, although it is through an awareness of all the elements of a place that she feels one can truly appreciate the wonder of a place. The word "wonder" was used by Massey (2005a) in an earlier quote in this section, where she was still able to enjoy walking across the fells of the Lake District while aware of the multiple elements of its on-going evolution. It could be argued that this deeper insight into the place provided a different dimension to walking as a more informed hiker.

3.4 Palimpsest and multimodality

The dilemma of how to represent the findings of different ways of investigating a place has been raised by both Massey (2005a) and Somerville (2010), but from different perspectives. In Massey's (2005a) case it related to the dilemma of how to represent space, if it meant capturing time and creating a historical picture. The representation of time-space which Massey (2005a) perceived to be a question of 'spatialisation' posed a problem as life is both spatial and temporal: "[F]or in the very moment of its conquering triumph 'space' is reduced to stasis. The very life, and certainly the politics, are taken out of it" (Massey, 2005a, p.30). Here Massey raised the problem of how to represent happenings in a place, to avoid them appearing to be events in historical time while space is a lived space. However, this does provide an opportunity for negotiating a politics of space, one which is truly open to undecided futures. Such a view is contrary to modernity where Massey (2005a) recognised there was one future, a developed one, that all countries and cultures aimed to follow.

Instead through questioning the representation of space through time it released a plethora of different futures (Massey, 2005a). This supported the need to investigate a variety of ways of representing place. Such a view, is evident in Massey's (2005a) aim to introduce different place stories, each with some degree of autonomy, where the space has not been tamed by the temporal, but instead becomes the meeting place of different trajectories: "[P]laces, rather than being locations of coherence, become the foci of the meeting and the nonmeeting of the previously unrelated and thus integral to the

generation of novelty. The spatial in its role of bringing distinct temporalities into new configurations sets off new social processes” (Massey, 2005a, p.71). This process could become a catalyst for creating different future pathways. Such a view of the study of place, clearly sets it within the social sciences, and takes a constructivist view through social interaction.

In adopting a post-colonial lens, Massey (2005a) and Somerville (2010) bring into question the colonised view of isomorphic spatial development and in the process, introduce different views, ones that would not have been a part of modernity. In so doing, they query the original colonised power and instead introduce fresh approaches (Massey, 2005a, Somerville, 2010). To achieve a more open view of place, as Massey (2005a) argued, would not be possible with a bounded conception of place. Therefore Massey (2005a) argued to move away from a Eurocentric view of place with a single path to development, with some places further along the path than others. Instead Massey (2005a) argued for a more open view where places could have a voice in shaping their own paths, in response to their own multifarious influences. This would be open to a variety of possible ways of developing through interaction with other places (Massey, 2005a). Here Massey (2005a) explained it is not possible to go and re-engage with a place, through a nostalgic view of the past, as it will have moved on, and instead recommended connecting with its present on-going story.

The means of how to connect with a place’s stories required the ability to communicate layers of incremental understanding (Massey, 2005a). This Massey (2005a) felt was hampered if it was solely reliant on textual communication. Here Massey (2005a) used the metaphor of having a palimpsest, which is likened to layers of geographical information which developed through re-writing interpreted spatial happenings. Furthermore Massey (2005a) felt the imperfect erasure of information provided hope for the re-emergence of earlier, non-Eurocentric knowledge based on the work of Rabasa (1993). Here Massey (2005a) is critical of the Eurocentric tendency to erase earlier non-European cultural information during the process of colonialism. Indeed, she is hopeful through using the idea of palimpsest with imperfect erasure of earlier information, that some of this past knowledge may still emerge (Massey, 2005a). In fact, Massey is critical of palimpsests for failing to bring information alive: “[D]econstruction in this guise seems hampered by its primary focus on ‘text’, however broadly imagined. To picture this argument through the figure of the palimpsest is to

stay within the imagination of surfaces – it fails to bring alive the trajectories which co-form this space” (Massey, 2005a, p.110). This temporal view of a palimpsest is sympathetic with Bailey’s (2007) work on archaeological palimpsests which form a series of geographical layers. However, there is no reason why these layers could not extend below the surface. This would be sympathetic with Bailey’s (2007) interpretation of different palimpsests that showed the variety of ways in which the concept can be interpreted, which extended beyond focusing on textural communications. His broader view of a palimpsest demonstrated how it could be temporal and have multiple facets, which is sympathetic with Massey’s (2005a) interpretation of place consisting of a variety of trajectories, each pursuing their own time spans. This is evident in Bailey’s (2007) broader interpretation of a palimpsest that extended to include a range of temporal scales which could be geologic, geographic and extended to a variety of phenomena. Here the interpretation allowed for variations in individual interpretations of time and the focus of a study.

The spatial aspect of palimpsests, which can extend from the micro studies of individual artefacts to regional studies (Bailey, 2007) indicated their relevance for being incorporated into a temporal study of a place. There is debate over where the line is drawn between past and present, which appears to vary according to the phenomena being examined (Bailey, 2007). From a geographical perspective Bailey (2007) recognised differences between the social and environmental trajectories which in this instance could be ecological timescales. However, the debate widened to consider whether it is ever possible to have a ‘monoscalar’ perspective when viewing place (Bailey, 2007). This view of a palimpsest would indeed complement Massey’s (2005a) criticism of modernity’s single linear story and allow for the incorporation of multiple interacting trajectories. In incorporating a variety of timescales, it would add to Massey’s recognition of the diversity of aspects of a place that needs negotiating, which varies according to the context being studied. Bailey (2007) accepted that evidence decreased with time. Nevertheless, Bailey (2007) acknowledged the way in which a place is perceived depends on how it is observed and he compared the difference from a ground and aerial perspective. Geographers regularly use a variety of tools to examine a place, including satellite images to provide a different view.

Consequently, after reflecting upon the influencing factors contributing to the composition of a palimpsest it is perceived to be a complicated intricate structure. This is

recognised by Bailey (2007) who identified five different categories of palimpsests: true, where all previous information had been eradicated; cumulative, consisting of a number of layers, which are reworked with additional information; spatial, allowing for the integration of information from different locations; temporal, with evidence within the same deposits from different ages and life cycles; palimpsests of meaning, which relates to the life history of products. The interpretation of palimpsest which is characteristic of Massey's (2005a) interpretation of place that has shaped this research is a cumulative one that incorporates the last four identified types of palimpsests, especially as the differences appear to be blurred when applied to a geographical context. A temporal palimpsest in its concentration on a single episode could be interpreted through Massey's (2005a) lens as being too bounded. On the other hand palimpsests of meaning would incorporate the changing lifecycles of objects which has relevance for geographical studies of changes in transport, energy, agricultural and industrial phenomena.

A broad definition would apply to this primarily contemporaneous research into place which nevertheless has been influenced by past geologic, ecological, social, agricultural and historical happenings. At the same time, it could incorporate Bailey's (2007) recognition of a geological time span of the past 1 to 3 million years, and a "durational present" of a sociological and historical perspective of the last 300 years. The following definition of a palimpsest suggested by Bailey (2007) would offset Massey's (2005a) criticism of the concept for being too archaeological:

In the metaphysical domain the ultimate goal is to demonstrate that what we call the past is actually part of our durational present, and to use an archaeological perspective to demonstrate that our present world is quite different from the conventional view of it, and cannot be properly understood without the benefit of an archaeological dimension, in which the concepts of past, present and future are shown to be essentially arbitrary – and, of course, open to varying definition according to the time perspective of the observer (Bailey, 2007, p.220).

Here Bailey's (2007) definition of a palimpsest provides an opportunity for a variety of ways of engaging with the concept to provide a tool to support the contextual study of a place. Such a conception of a palimpsest would direct a study of a place to have a temporal view although Bailey (2007) cautioned that any future view is grounded in current understanding. The spatial definition of the place being studied could extend from a small scale to include the world which Massey (2014) indicated was a global place.

The conception of a palimpsest is essentially from an anthropocentric viewpoint although a metaphysical perspective could incorporate a nonhuman lens in the creation of a geographical interpretation of a palimpsest.

Somerville (1999) has interpreted the idea of a palimpsest as layers of mapped information and during the process of interpreting its representation adds to its conceptual understanding:

In the moonlight I have a vision of layers of maps superimposed on each other, as if drawn on each other, as if drawn on tissue paper, so that all the layers are visible through the others. The first layer is the dancing places of Aboriginal women; it is Aboriginal women's mapping of place through story, song, dance, and site – linked by songlines to other sites across the landscape. The second layer is the superimposed one of white settlement at Pine Gap – road, fences, gates, gatehouse, and the symbolic white domes beyond. The final layer is made up of images of the women's peace camp, re-colonising the roadside with cloth, tents and banners, recasting the meaning of gates with flowers and leaves, remaking fence and road with new stories. (Somerville, 1999, p.25).

In Somerville's narrative about palimpsests they have a temporal and spatial dimension while at the same time there is a linear line of themed developments of different cultural activities. The diverse ways in which information is portrayed included the symbolic contextual meaning of the white domes. The first layer is linked to Aboriginal and Torres Strait Islander communities use of songlines, which could be perceived to be a palimpsest. A songline is a way of passing on traditional knowledge about a place that extends back to the last ice age (Somerville and Perkins, 2010). Singing is contextually related to the well-being of a place and its inhabitants (Somerville et al., 2010). At the same time the process of singing has a recognised format through singing all the elements of a place into being and songlines perform the task of connecting places across a landscape (Somerville et al., 2010). Songs are perceived to be dynamic in their aim to connect people to a place but in order to do this the singer needs to know the country (Somerville et al., 2010). However, with this deep place knowledge comes responsibility to use it wisely to protect a sacred country (Somerville et al., 2010). In the process it revealed an additional layer of information, one that Somerville and Perkins (2010) felt could be used to bring new life back to damaged places: "[H]ow can we learn to 'sing' our coastal landscapes differently? How can we bring traditional understanding of singing the country, singing for the renewal and wellbeing of people and places, into a contemporary present?" (Somerville and Perkins, 2010, p.3). Here songs and songlines are perceived to

have a temporal interpretation, one that can build on earlier cultural knowledge. However, Somerville's (2010) contemporary interpretation and use of a palimpsest has encompassed detail of people and their actions.

The work of Somerville (2010) has translated the means of nurturing alternative place stories through the adoption of her place pedagogy. It demonstrated how to make place pedagogic. Such a pedagogy evolved around her trilogy of learning about place through stories, with place learning being local and through having an embodied presence and thirdly with fresh learning emerging through the zone of contestation. This approach may not transfer to all cultures and situations, especially if a place has not undergone a similar pattern of colonisation (Somerville, 2010). Nevertheless, it could be used as a means of viewing different trajectories. All of which will require an alternative means of representation, which Somerville (2010) recognised was necessary through her broad interpretation of stories. In the case of Pine Gap, it included the use of photographs to be able to retell the stories including a sense of being in the place, as well as the use of journal writing (Somerville, 1999).

Throughout her work, Somerville (1999) has been critical of the ability of the written word to adequately convey a complete place story, especially if it is going to communicate sensory embodied place findings. Each story from such an origin will be a unique place interpretation, one that does emerge from the storytelling: "[I]n telling the story of place it comes into being as a particular landscape evoked by a particular body, just as I come into being through that performance" (Somerville, 1999, p.4). The concept of story in Aboriginal and Torres Islander culture related to deep knowledge about a place that is spoken into being through the retelling of the story. Traditionally stories used to be communicated through songs as this was perceived to ensure the health of Country (Somerville and Perkins, 2010).

The question here is how to convey these experiences, which led Somerville (1999) to explore the use of photography, dance, poetry as well as written narrative. In her deliberation over how to support the emergence of fresh stories, which have their origin in language. Somerville (1999) valued the need to talk through place experiences before telling a place's story. It is here that Somerville's broad interpretation of story (2010, 2013a) in terms of embracing the opportunity to use films, artwork, drama, poetry, agricultural reports has similarities with multimodality. It was the process of telling and

representing stories, through an embodied-self that Somerville (2013a) felt could stimulate fresh stories.

Representation is clearly interpreted by Somerville (2013a, p.60) as a means of 'passing on knowledge'. The use of images, in various formats, provides the viewer with an insight into being in the represented place. Here Somerville (2013a) noted the ability of artwork to link western forms of communication with indigenous views of Country. These are particularly significant when people had different languages to convey their understanding of being in Country (Somerville and Perkins, 2010). This is evident in the territorial limits of the language territory occupied by the Gumbaynggirr people in coastal New South Wales. Each territory along the coastline is evident from a clear landscape pattern of headland followed by beach and estuary (Somerville and Perkins, 2010). These changes in the landscape ensure each territory had a diversity of ecological landscapes (Somerville and Perkins, 2010). Certain features have deep symbolic meaning for example Red Rock, called Ngaalgan, on a mid-north coast where the estuary is particularly wide (Somerville et al., 2010). Ngaalgan stands for the ear and represented deep listening in Gumbaynggirr (Somerville et al., 2010). This coastline has nine separate language territories, which are subdivided into smaller clan units with their own names and local influences (Somerville et al., 2010). However, with colonisation came territorial fencing that robbed local clans of access to their lands and in the process restricted their ability to move freely through their territory (Somerville et al., 2010). There was a small area at Corindi Lake, which locally became known as 'No Man's Land' where the local clan could eat and survive using local resources (Somerville et al., 2010). Young people were told different aspects of knowledge about the land, medicines, plants and animals (Somerville et al., 2010). Consequently, they needed to talk to one another to be able to communicate this knowledge (Somerville et al., 2010). During this process they witnessed the growth of coastal settlement, loss of their land, identity and devastation of the landscape (Somerville et al., 2010). This was a dynamically changing place.

Stories were used to pass on deeper place knowledge and understanding: "[I]t is story that embodies the connections between people and places." (Somerville et al., 2010, p.161). Stories were used as a means of sharing essential information about how to live sustainably in a place through knowledge of local resources (Somerville et al., 2010). Local places were looked after because they were essential to a local clan's survival, so there was a need to share knowledge about how to care for a place (Somerville et al.,

2010). The declining state of Corindi Lake was instrumental in Tony Perkins work in the formation of the Garby Elders and the Yarrowarra Aboriginal Corporation to pass on their local cultural knowledge (Somerville et al., 2010). Tony passed on the knowledge through oral stories. It is this space between language and its translation into the written word that was a difficult process in sharing different cultural knowledge with the potential to create fresh understanding (Somerville et al., 2010). Recording sounds helped to pass on knowledge of sounds associated with local places, in the form of birdsong or the sound of the wind through tree leaves, in the format of a soundscape, all helped to bring a place alive (Somerville et al., 2010). These sounds gave the place its own unique meaning (Somerville et al., 2010). Sensory place recordings provided a way of creating a connection with the unique features of a place, to tell its story.

Another way of representing traditional knowledge sources included deep mapping which is a means of connecting traditional language with stories located in places (Somerville and Perkins, 2010, Somerville, 2013a). Deep mapping was fundamental to Somerville's (2013a) ethnographic research about mapping water. Stories are often related to changes in the landscape (Somerville, 2013a). Road maps from which English place names had been removed were replaced with images and the text of stories (Somerville, 2013a). The map was designed to be a reversal of colonisation (Somerville, 2013a). The aim was to retain stories with traditional meaning related to the land although the nature of the place has changed over time. When retelling stories, the present layers of current land use are peeled away, and the stories are told through the allusion to visual images. The maps represented layers of information from early creation stories represented in the present-day: - "[B]ehind these images lies a deep knowledge of story, language and country" (Somerville and Perkins, 2010, p.179).

These stories were developed from cultural mapping of oral traditional stories with the Gumbaynggirr of mid-north of the New South Wales coast. The process included recovering lost languages and the knowledge they held about Country (Somerville, 2013a). In an Aboriginal and Torres Strait Islander context Country is understood as referring to the people as an integral part of the natural and human world (Somerville, 2013a). Trained Gumbaynggirr researchers interviewed Elders about their traditional knowledge. However, finding the location of the sites of these storylines on road maps proved inadequate because they were spread over large areas of land (Somerville, 2013a). This led to using satellite images where it was possible to connect with physical

changes in the landscape to locate the relevant sites of the stories (Somerville, 2013a). Location is important as people relate themselves to a part of Gumbaynggirr country. Consequently, Tony Perkins would introduce himself through identifying his local links with the place and its people (Somerville et al., 2010).

Western mapping transmits locational knowledge through information written on a map (Somerville and Perkins, 2010). In *Water in a Dry Land* (Somerville, 2013) Aboriginal and Torres Strait Islander artwork provided another layer of meaning. Deep mapping was related to traditionally walking trails that linked ancestral stories about places, which joined together and formed a storyline (Somerville, 2013a). Walking was central to Somerville's (2013a) ethnographic work which recorded information about places where water was found. Somerville and Perkins (2010) took roadmaps and removed information and transposed the recorded stories and photographs. The process is perceived to be an undoing of colonisation (Somerville, 2013a). The map has layers of information that link the past and present through the creation of visual maps: "[P]lace is known through the senses, through the body, and the subtle pedagogies of layered storying which every place contains. Writing about place is an ontological act, producing the self at the same time as writing the words" (Somerville, 2013a, p.19).

Somerville has adapted deep mapping to link creative means of representation with words to produce place understanding. There is the possibility of exploring alternative ways of representing information about a place from which fresh insights may emerge. While walking trails link places and knowledge of local ecological sources of information about food and stories of past events (Somerville et al., 2010). The walking provides a way of learning about Country (Somerville et al., 2010).

3.5 Assembling a sensory conceptual framework

The conceptual framework informing this study has taken the essence of ideas from Massey and Somerville which has signposted this alternative place pedagogy. The need to represent sensory place investigations led to investigating a multimodal approach to communicate the findings. Figure 1 summarises the key elements of this conceptual framework which includes i) place knowledge, ii) pedagogy and iii) representation of findings. The diagram includes a summary of what is being studied, how and has an opportunity for reflection to support learning through creative representation of the findings. For all this to take place there is a need for fieldwork to enable the students to

have an embodied sensory place presence. Consequently, I argue that all the above elements need to be in place to support young people to make deeper place connections. Each of three components of the conceptual framework are examined separately together with their interrelationships.

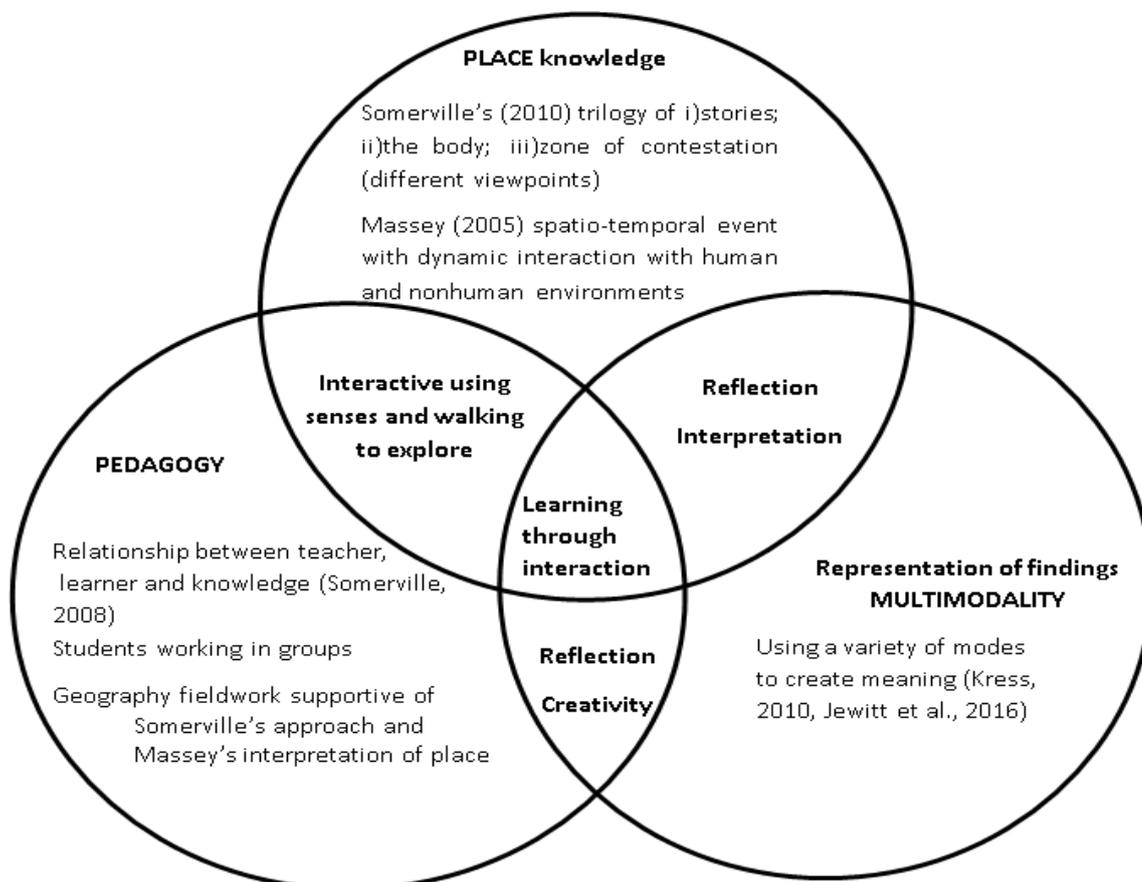


Figure 1. Visual summary of the conceptual framework

3.5i Place knowledge

The argument so far has foregrounded an understanding of place as being dynamic, in a constant state of becoming (Massey, 2005a). At the same time there needs to be an appreciation of the multiple facets, human and nonhuman, each following their own trajectories, moving at different rates while converging on a place (Massey, 2005a). All of this requires negotiation (Massey, 2005a). Consequently, place knowledge is not bounded. Indeed Massey (2005a) raised awareness of the local role in the global construction of a place, demonstrating it has a tangible local presence. In creating an understanding of place, there is an appreciation of the interweaving of stories which contributes to its formation.

To appreciate the sense in which a place could be construed as an event requires an understanding of the unique composition of a place's component parts (Massey, 2005a). This needs an ability to contextualise a place's past, present and future. While likening the evolution of a place to a palimpsest, where layers of past happenings are integrated with present configurations provides a way of contributing to a deeper place understanding. However, Massey's (2005a) contribution is essential in striving for an open comprehension of a place, where the future is unknown. Negotiating a different future for a place, one that involves the human and nonhuman will require ethical consideration (Massey, 2005a) about its sustainability. Here Massey (2005a) cautions against taking an overly romantic view of local places at the expense of the global, which is also considered a place, each requires care.

The means of gaining access to this place knowledge is through adopting a Somerville (2010) approach and having a sensory embodied place experience. This emerges through layers of stories. In addition, place learning through the body, supports a sensory approach and offsets binary thinking, for example rejects separating the mind/body and instead involves studying a place through a whole bodily awareness. The context of this study does not allow for the complete transfer of Somerville's post-colonial philosophy, but it does support listening to different viewpoints. These include Somerville's (1999, 2013a) appreciation of accumulative layers of place knowledge and is supportive of a palimpsest of knowledge which is inclusive of cultural and ecological diversity from her work with Aboriginal and Torres Strait Islander communities. Throughout Somerville's (2013a) work there is an emphasis on considering the future well-being of a place, especially its nature, which is linked to how we act out our lives in local places.

The incorporation of the non-human including an appreciation of nature is evident in Massey's (2005a) study of the Lake District which integrates the study of space and place, to form a 'spatio-temporal' event. The concept of a temporal event is apparent when examining the geological evolution of the area which is continually evolving (Massey, 2005a). At the same time Massey (2005a) is critical of past conceptions of the region, which in waxing lyrical about its social and cultural history, do not delve into its ecology. These trajectories like geology, are also moving and evolving, but following different time paths with an interweaving of all these elements to create a place (Massey, 2005a). Consequently, a study of a place needs to negotiate the interrelationships between all

these different trajectories. This would create a place snap-shot, a place event. However, this study does not aim to provide a static view of a place.

3.5ii Representation of findings

There are reasons to explore a different way of representing the findings which stem from the way in which the data is collected and expressed. This is compounded with concern from Massey (2005a) about the ability of text to adequately convey meaning. Somerville's (2010) broad interpretation of developing meaning through place stories, suggests the need for a different way of writing. Thirdly in positioning the students to have a more active role in how they collect and represent their findings, commensurate with Article 13 of the UNCRC (1989) will encourage diversity, which is reflective of Somerville's (2010) interpretation of stories. The need to support students in representing their findings in a variety of modes, interpreted here as a "means for making meaning" (Jewitt et al., 2014, p.2) became more apparent as the research progressed. This was fuelled by the students who led the research into multimodality, which is understood to include the representation of a variety of socially created resources for formulating meaning. Adopting multimodality, broadens the choices open to students to represent their findings to go beyond verbal language (Kress, 2010). Multimodality became a key part of the research in helping students to fully engage with a Somervillian approach while at the same time supporting the interpretation of Massey's (2005a) conception of place as being a dynamic event, consisting of layers of thrown together information which required negotiation.

There are two key ways in which multimodality became fundamental to this research: in supporting students to explore different modes to investigate being in a place; and in providing the modal means for the students to represent their findings. Consequently, the questioning of the ability of language to adequately convey understanding about the study of place by Somerville (2010) and Massey (2005a) and the pupils search for creative ways of representing their findings signposted the research towards the inclusion of multimodality. This is particularly informed by the work of Kress (2010, 2017) which demonstrated the potential of different modes of communication and in the process, calls into question the dominance of written language for conveying meaning. A further discussion of multimodality takes place in chapter 6.

Multimodality, in its facility to go beyond written narrative and embrace culturally produced semiotic representations of place (Kress, 2010) aligns both conceptually and in practice with Somerville's (1999, 2007c, 2010, 2013a) work in Aboriginal and Torres Islander communities. At the same time, it has the potential to embrace sensory generated data and facilitate the creative representation of findings. It has the means to encompass a sense of wonderment, while providing an opportunity for fresh understanding to emerge (Somerville, 2010). In having the facility to allow for a reflective representation of place, it has the potential to support feminist post-structural thinking which is evident in Somerville (2007) and Massey's (2005a) ideologies and in this research. Consequently, multimodality is integrated into this research to conceptualise and represent place in complex and innovative ways and to support the analysis of the students work as they responded to the sensory pedagogy created and implemented in the fieldwork component of this research project.

3.5iii A facilitating pedagogy

Pedagogy is interpreted here as the activity of the teacher and pupils working together to create a learning environment. The composition of this pedagogic approach is different in supporting the students to recognise that they do have a perspective to contribute to the construction of this investigation. The learning environment needs to allow the pupils to creatively engage with the study of a place, in such a way that allows them to take an active part in their learning, which may result in "organised chaos" (Somerville et al., 2011, p.15). The term 'organised chaos' allows for an element of uncertainty and means the learning outcome is not pre-determined (Somerville et al., 2011). In situating the pedagogy around a contextual experience, it supports the students to get to know a place in a different way.

In my research, pedagogy functions as a way of relating the students with the study of a place which was evident in Somerville's 2015 work. The enabling pedagogy of how to study place involves adopting the first two elements of Somerville's (2007, 2010) trilogy of through learning about place through stories and having an embodied place experience. The accentuation in this conceptual framework is in ensuring a sensory embodied experience is a sensory one. The zone of contestation, the third element of Somerville's (2010) trilogy which is relevant for an Australian cultural context, that involved border crossing between different indigenous and non-indigenous populations,

but when transposed to a western context, could be construed as negotiating different viewpoints and issues to support the emergence of fresh understanding. The key elements of adopting a Somervillian approach (2010) i.e. having a sensory embodied place presence and learning about place through stories, supports a different way of being and learning about being in a place.

3.6 Research Questions

The following research questions have evolved from the literature review and from the discussion of its conceptual implications. Consequently, this section introduces the research questions and embeds them within this narrative. Each of the following three research questions will be discussed in turn:

1. How can pupils come to know a place in a different way through developing embodied sensory experiences?
2. Does the nature of how pupils represent their findings influence their connection to place?
3. Is the concept of palimpsest a useful one in understanding a place?

1. How can pupils come to know a place in a different way through developing embodied sensory experiences?

A key motivation for the research came from the plea for a different way of engaging young people in the study of place. This quest was influenced by the work of Somerville (2010) who sought to find an educational response to environmental issues that currently face our places as evident in the media and scientific reports (Somerville et al., 2011). Somerville (2010) sought to explore how a generation of young people living in a global world could come to know and care for their local places through incorporating influences from her work with Aboriginal and Torres Strait Islander communities. This question is explored through incorporating her alternative approach which included developing embodied place experiences and representing findings through stories which are broadly interpreted to include a variety of genres (Somerville, 2010). However, for the purposes of this research in a western context the concept of exploring a zone of contestation will relate to geographical issues affecting a local study location.

Geography fieldwork will provide the means for exploring an experiential sensory approach and adopting a different approach meant being aware of the existing way of studying place in geography fieldwork. A traditional approach was identified by Widdowson (2017) to include a linear pathway in pursuit of gathering data to answer set hypotheses, often devised by the teacher (Widdowson, 2017). This research in following Somerville's (2010) thinking is searching for an alternative to a scientific approach which is reflective of the positivist thinking that was dominant in the subject during the 1970s quantitative revolution and Widdowson (2017) perceived is still prevalent in school fieldwork today. There is a need to search for an alternative way of engaging with a place as Widdowson (2017) questioned whether a traditional approach has led to conceptual understanding.

Consequently, in adopting an experiential approach Job (1999) considered it could be more challenging to organise but there is scope for exploration. Furthermore, it could provide opportunities to encourage students to have an input into shaping the composition and mode of representing their place research commensurate with Article 13 of the UNCRC (1989). The work of Somerville and Green (2011) have supported this following a "*pedagogy of responsible uncertainty*" (p.21, italics in original) in terms of allowing students to ethically experience a place in a different way, one where the outcome is not known in advance. This experience was felt to be commensurate with research into an alternative place pedagogy.

A sensory approach to fieldwork would be reflective of Somerville (2010) and Massey's (2005) post-structural thinking in searching for more open ways of coming to know a place. In allowing each student to individually experience a place using their senses could provide a range of data in different formats which would support Massey's (2005) criticism of textual communications for being constrictive. Consequently, I argue in adopting an alternative sensory approach it would scaffold the students to explore different genres to find ways of representing and communicating their place findings. This would sow the seeds for Somerville's (2010) argument that understanding emerges during representation, especially in this case where the students have time to reflect over their fieldwork before their next lesson when they needed to start their follow-up activities.

The means for developing a place pedagogy that allowed for a different ontology and epistemology was through sensory based fieldwork activities following the thinking of Somerville (2010). Other geographical insights informing our awareness of being in place included Cresswell's (2015) recognition of the earlier humanistic geography of Tuan (1975, 1977) with his emphasis on the use of a sensory experiential means to get to know a place. There is scope within this approach for building on the phenomenological work of Tuan (1975, 1977), Relph (1976) and Rodaway (1994) with their sensory experiential perspectives. The work of Tuan (1977) highlighted the importance of our kinaesthetic sense of movement in exploring place to allow us to engage with a place through using our senses.

These will be incorporated through fieldwork to explore and establish a sense of place. A sense of place is interpreted here using Cresswell's (2015) definition of incorporating personal feelings about a place. In this scenario a sense of place includes Job's (1999) appreciation of a place's unique characteristics. Searching for a sense of place would provide a focus for the students' affective sensory fieldwork.

Searching for a sense of place would also allow for the inclusion of literary means of expressing place experiences and in the process address Rawling's (2011) plea to explore more phenomenological aspects of being in place. These would be supported through the open nature of the research question. My argument for following this first research question was to explore whether pupils can come to know and interact with a place in a different way through exploring embodied sensory experiences and make deeper place connections. Consequently, I argue in adopting Somerville's (2010) poststructural lens in coming to know a place through their senses, the body, stories and examining contentious place issues would stimulate an alternative engaged place pedagogy. It would allow for contextualised knowledge through adopting Massey's (2005a) geographical lens which included negotiating the geological, economic, social, political and physically happenings occurring in the place.

Such an approach would support the students to develop as Widdowson (2017) argued their own values and produce individual data which is unknown in advance. In adopting an enquiry approach as suggested by Job (1999) and collecting data through a variety of modes (Kress, 2010) sets the scene to develop Somerville's (2010) broad interpretation of place stories. Consequently, this approach is exploratory, and the outcome is uncertain.

2. Does the nature of how pupils represent their findings influence their connection to a place?

To arrive at a discussion about the effect of how pupils represent their findings it is assumed that they will first have engaged with a place in a different way so creating a wide range of data. The inclusion of this question reflected the recognition Somerville (2010) gave to the representation of findings stimulating the emergence of fresh understanding. The development of a different place ontology has implications for how the students relate to a place and subsequently represent their findings. The interpretation of representation is a broad one that encompasses Somerville's (2010) wide range of genres under the umbrella term of place stories which could include reports, audio recordings, artwork, poetry, photos, written presentations and mapwork. This broad range of representations would address Rawling's (2011) recommendations for the inclusion of literary methods to connect with a place.

The broad interpretation of ways of representing findings is in recognition of the interdisciplinary nature of the concept of place (Somerville, 2010, Cresswell, 2015, Rawling, 2018). It would allow the students to creatively engage with the design of sharing their findings and understanding from being in place. It would provide scope for including contentious issues through Gruenewald's (2003) negative processes at work "decolonisation" with an opportunity to appreciate the emergence of fresh place stories including ecological "re-inhabitation" (p.4). The process of representation could allow the students to develop their geographical vocabulary and grammar (Lambert, 2011, 2017) to support their ability to think geographically (Jackson, 2006) in relation to a place so making located connections.

The process of encouraging the students to contribute to shaping their investigation and representation of their findings is reflective of the UNCRC (1989) Article 13. This has the potential to support the students to take ownership of their investigation and stimulate deeper conceptual understanding. This would support the students to choose a learning style that they felt comfortable and confident with (Dunn, 1989). This could lead to more diverse forms of representations to enable students to understand a place's unique sense of being in a place.

The overall process could contribute to overcoming Hopkin's (2013) recognition that students still fail to fully understand the meaning of place. Greater place understanding

could allow the students to develop a deeper sense of place and wonderment which Massey (2014) felt is based on knowledge. This question could allow students to express how they perceive the place and through coming to know a place in a different way the students could start to care about its future.

3. Is the concept of palimpsest a useful one in understanding a place?

The concept of palimpsest is broadly interpreted here taking Bailey's (2007) definition of the interwoven succession of deposits of varying scales and timespans. There is an understanding that there is less knowledge of the distant past (Bailey, 2007). The conception of a palimpsest in this instance has followed Bailey's (2007) understanding that the future is influenced by the present so allowing for a continuum from the present to a future forming part of a "durational present" (p.216). This conception of time could vary according to the lens being applied to view the trajectory or the object of investigation which Bailey (2007) identified as a palimpsest of meaning. Consequently, I argue that a broad interpretation of the concept has the potential to develop deeper conceptual understanding of a place through increased contextual knowledge. It could offset Massey's (2005a) dilemma of how to avoid a historical view of a place.

Before examining Bailey's (2007) nuanced understanding of a palimpsest, the work of Hammond et al., (2018) suggests there is mileage in studying a place through its incremental layers. Their work with key stage 3 students in studying the Lottery funded Layers of London project noted that the layers of historical information helped the students to understand how the city has evolved (Hammond et al., 2018). Here palimpsest is being used to explore layers of information about the city's development. This research in integrating Bailey's (2007) broad interpretation of a palimpsest aims to investigate whether giving the students incremental place experiences supports them to conceptualise their place understanding.

In taking Bailey's (2007) five ways of interpreting a palimpsest some are more relevant than others in contributing to a geographical understanding of place. A true palimpsest where earlier layers have been erased (Butler, 2007) would not add contextual understanding of present place happenings. However cumulative information where it is difficult to differentiate between layers due to blurring, intermingling or different rates of chemical disintegration or physical erosion (Bailey, 2007) could help to contextualise understanding about a place's evolution. The classification that I feel has most relevance

for adding to a geographical understanding about a place is Bailey's (2007) palimpsest of meaning which examines the changing interpretations of objects with changes in their use. In addition, geographers have a long affiliation with layers of information through geological time. Here Bailey (2007) considered geological deposits in the last 1 to 3 million years as being modern, an understanding of geologic deposits could further contextualise and develop place understanding.

However, I argue Bailey's (2007) recognition of the varied nature of different components of a palimpsest each with their own temporal trajectories has resonance with Massey's (2005a) recognition of the dynamic nature of a place. The argument of increased linkages across temporal and spatial scales is used by Bailey (2007) when viewing erosional features. It is an awareness of the interrelationship of past happenings, human and nonhuman which have shaped the present character of a place that is being taken forwards to inform and support students' conceptual understanding of place.

A more open view of a palimpsest which extends beyond the archaeological perception of the past, requires an unravelling of layers and would offset Massey's (2005a) criticism of palimpsests for being too archaeological. A wider interpretation of the diverse nature of palimpsests that includes a contextual examination of artefacts would potentially offer a way of including an evolutionary study of a place. The incorporation of the multiple ways in which buildings and artefacts have been used over the centuries would stimulate an unravelling of the past and support deeper contextual place understanding.

The concept of a palimpsest has the potential to encompass multiple trajectories of different artefacts with their own timespans to add depth to the study of a place and how it has evolved. This would complement Massey's (2005a) temporal view of the spatial happenings of different phenomena within a place, each following their own trajectories. In viewing a place through a palimpsest lens it would stimulate the inclusion of examining earlier place events. The interpretation of artefacts could stimulate geographical thinking in encouraging the students to make connections between the processes (Massey, 2014) and practice relational thinking which Jackson (2006) identified as a characteristic of thinking geographically. Therefore, examining layers of evolutionary changes could add depth, knowledge and contextual understanding to a study of a place.

There are similarities with Somerville's (2013) view of past Aboriginal and Torres Strait Islander place stories which could hold the key to place knowledge sources that could

provide insights into different ways of living in a place. Somerville (1999) used a palimpsest to explain the layers of her experiences of being in the Australian outback. The metaphor of a palimpsest was used by Marvell and Simm (2016) in helping their undergraduate students to understand the urban geography of Barcelona. Fieldwork was valued for giving the students an opportunity to experience the city's culture and aesthetics of the place (Marvell and Simm, 2016). It was helpful in establishing a sense of place. This secondary level geography fieldwork aims to similarly allow the students an opportunity to experience a place in a variety of ways to support them to unravel the multiple layers of happenings within their place of study. The spatial and temporal insights in this instance aim to look for influences that extend beyond the local place and span historical time. At an individual level the question aims to investigate whether giving students layers of place experiences and activities supports them to gain deeper place understanding.

All three research questions could collaboratively add in-depth knowledge and understanding about a place. There are messages for developing an incremental methodological approach in the next chapter to support the application of the research questions.

Chapter 4

Methodology

4.1 Introduction

The purpose of this methodology chapter is to explain what data is needed to answer the research questions and how it will be collected. The chapter includes a description of the means used to collect the data. These decisions were taken to ensure the methods are relevant to this research context, to investigate the sensory means of teaching place in secondary geography. In addition, there is a description of the methods used to collect the data. At the same time, the rationale for the choice of a case study to support the research process is discussed. Following this there is an explanation of the selection of techniques used and how they were analysed to help the reader to understand the study. The role of the methodology is to support the introduction of the research to provide contextual information to answer the research questions.

The chapter follows a developmental route in supporting the evolution of the methodology and has six main sections. The first includes a discussion of the qualitative nature of the research which has influenced the nature of the data collected. Secondly the rationale for choosing a case study is examined and its development. Thirdly there is a brief section explaining how the research was introduced into school. This is followed by a section which examines the methods used to collect and analyse the data. The last main section considered the ethics relating to the study, which is followed by a summing up of the chapter.

4.2 Qualitative research

The way in which the concept of place has steered this research, through the comparable ideologies of Somerville and Massey, has led to following a qualitative approach. The argument is that all these varying influences which converge on a place, cannot be reduced to set of hypotheses and a few isolated criteria. A more responsive, qualitative approach is required, this is taken a step further by both Somerville (2010) and Massey (2014) in their search for a way of engaging young people to know their local places in a different way, one that will lead to a sense of responsibility toward them and their broader connections with the global planet. All of which has been discussed in the conceptual framework, but its relevance here is for finding ways in which such an

approach can be introduced into the study of a local place. This has been identified as a challenge by Somerville (2010) and Lambert (2017): “[T]o introduce the world to students as an object of geographical thought requires pedagogic ingenuity, for subject knowledge may otherwise remain unconnected and ‘inert’” (Lambert, 2017, p.20). The methodology has been developed aware of the need to encourage the students to engage with the study of place in a different way, where the focus begins with their experience of a place. In supporting the introduction of the conceptual framework, the methodology incorporated Somerville’s (2007d, 2010) ethos of an enabling place pedagogy. This approach was followed in the Australian *Love Your Lagoons* (Somerville et al., 2015) project with its place-based learning in south western Sydney and included a multi-faceted approach to student data collection, representation and analysis.

The qualitative route has been further shaped by the open, rather than closed, nature of the research questions. At the same time the research sits comfortably alongside Miles, Huberman and Saldaña’s (2014) characterisation of a qualitative genre in terms of its empirical nature, where understanding is achieved through interpretation of experiences drawing upon a balanced range of lenses and perspectives. A qualitative approach is compatible with Cresswell’s (2008) call for school geography to think about place more deeply and consider its meaning through our experiential, imaginative and reflective connections with the study of place. Meanwhile a qualitative approach was perceived to appreciate the complex nature of the study, with its many facets.

The inclusion and valuing of creative thinking is compatible with Somerville et al.’s (2009, 2011) exploration of ways of educating young people to live more creative responsible lives: “[I]t is in the intersections among place, pedagogy and change that we have sought some strategies that could make a difference. This requires new research methodologies, new modes of learning and new modes of teaching” (Somerville et al., 2011, p.1). This methodological section aims to be exploratory in finding different ways of engaging young people in learning about place, while recognising geography’s tradition for promoting creativity especially in relation to teaching place (Rawling and Westaway, 2003). The aim is to put in place a broad infrastructure to develop qualitative data collection and representation methods, to cater for the wealth of student interests, abilities and learning needs. The next step, the choice of approach, a case study was chosen, for being compatible with qualitative research to support the investigation.

4.3i Rationale for selecting a case study

This project is viewed through Stake's (1995) interpretative lens of providing reflective insights into the multiple workings of a single case study approach. The qualitative approach followed in this research is sympathetic to Stake's (1995) focus on the workings of a case study, the classroom, students and teachers within it, as opposed to Yin's (2014) more positivist view of a case study as a method. To achieve this, time is spent delimiting its bounded nature (Stake, 1995). At the same time, it aimed to provide understanding of the complex working of a unique learning context (Hamilton et al., 2013). The approach facilitated the emergence of understanding from a single event but on the other hand allowed methodological triangulation, to increase confidence in the findings (Stake, 1995). This section will demonstrate how a case study approach was chosen to support the exploration of the research context.

The bounded unit (Stake, 1995) of this case study is a Year 9 geography class and their unit of work relating to the study of place. Consequently, it could be interpreted as an intrinsic case study in understanding the complex nature (Stake, 1995) of this unique configuration of methods for studying a place unfolded, within the context of this study. In the process of its introduction, an emic issue emerged, from the participants within the case study (Stake, 1995). This related to how to record and represent the findings of a sensory place investigation, which led to the incorporation of multi-modal means into the case study investigation. The choice of a case study approach allowed for its ability to be modified and reconfigured during its inception (Stake, 1995). Consequently, in not providing a straight-jacket, it has allowed the investigation to explore different avenues as and when required, opening-up creative and innovative pathways.

One of the reasons for selecting Stake's (1995) approach for studying a case study was the emphasis he afforded to having a conceptual framework which he felt would subsequently provide a basis for interpreting the findings. In addition, he felt it provided the means to support exploring contextual interrelationships, all of which helped to provide insightful information. Therefore Stake (1995) cautioned against rushing to reach conclusions. Following this advice, there is a need to promote reflective thinking and the ability to view interrelationships between different sources of information. This strengthened the argument for the inclusion of triangulation. Triangulation is interpreted here as providing the means to validate the findings which can emerge from providing

information in different formats (Stake, 1995). The formats of evidence in this case study followed those chosen by Merriam (1998) and included the use of observation, interviews and interpretation of activities, in this context, the material produced by the students. In addition, there were researcher reflective notes to inform how the case study worked. These observations Stake (1995) felt would help to tell the case study story, an approach reflective of the emphasis Somerville (2010) afforded to stories for communicating knowledge. Therefore, observations supported the opportunity for nuanced complexities to emerge (Stake, 1995). The inclusion of different sources of information, aimed to support the researcher to reflect and consider whether the same meaning emerged in different scenarios (Stake, 1995). For example, the inclusion of semi-structured interviews allowed different interpretations of events to become apparent and off-set my initial interpretation, if it is not shared by the Class Teacher or the students. The unique nature of the findings will make it more difficult to draw generalisations, a point which Stake (1995) emphasised: “[T]he real business of case study is particularization, not generalisation” (Stake, 1995, p.8). The search here is for unique insights gleaned from individuals as opposed to blanket generalisations. Here particularization does not mean rushing to draw impressionistic conclusions, but forming considered interpretations, from constructed knowledge based on evidence from different sources. At the same time the case study can provide insights into how the different parts of the research contribute to the understanding of the working of the whole case study, which Merriam (1998) identified as a characteristic of qualitative research. The information gleaned from this study can be used to inform existing knowledge (Stake, 1995) in this instance about the teaching of place in secondary geography.

4.3ii The research case study

A key factor Stake (1995) and Merriam (1998) noted about case studies, was the need for identified delimitations around the unit of study and its participants. This is supportive of Stake’s (1995) recognition of a case study as an “integrated system” (Stake, 1995, p.2). The aim here is to share with the reader who and what is studied, and where, within the parameters of ethical disclosure, this study will take place. Consequently, this section followed Miles et al.’s (2014) advice and examined the conceptual nature of the research, its size, general location and the duration of the study.

The case study is a small size which is compatible with Miles et al. (2014) interpretation of qualitative case study. It consisted of a Year 9 geography class and their geography teacher in a mixed comprehensive. There was a limited time slot to explain the research to the students, who were required to opt-in, to become participants in the research, following the supervisory university guidelines. There were 28 students regularly present in the class, with 27 returning their forms. The class was a mixed class of average and above average ability students. Of these, in 24 cases, both parents and pupils opted-in to participate in the research. In two cases the parents consented but the pupils did not sign the consent forms, while in another case, the parents and student did not wish to participate.

The first preliminary meeting with the class teacher took place in February 2016, in which we discussed how my sensory place pedagogy could be integrated into an existing scheme of work. It was agreed my research could be incorporated into a unit of work relating to sustainable tourism in the Broads, which included a morning's guided boat tour of the Broads and an afternoon spent in the joined settlements of Wroxham and Hoveton. The name of the fieldwork destination has been retained because of the significant role the location plays in developing a sense of place. The aim was to adopt an idiographic case study approach in terms of searching for meaning from the introduction of a different way of teaching place.

Consequently, the case study fieldwork involved being part of a Year 9 class's geography lessons, as a researcher observing their lessons and going on a day's fieldwork with them, for just under half a term. At the same time the Class Teacher and I had regular meetings in which we discussed how the research was going to be amalgamated into the work relating to Wroxham and Hoveton throughout the second half of the spring term and the first half of the summer term. During this time, we collaboratively explored how to shift a traditionally more quantitative approach to undertaking fieldwork to a qualitative sensory one with the students having an increased role in shaping the place investigation. The research with the students commenced after the summer half term.

4.4 The research design

The investigation was planned with the class teacher to complement and extend existing activities to make them compatible with this research approach to the study of place. The existing place-based investigation used each year centred around hypothesis testing

with a focus on the accumulation of numerical data, including doing a traffic survey. The activities were developed through negotiation with the class teacher to support a sensory embodied place investigation. The outcome was a compromise. The students were given disposable cameras to select and record features they felt were representative of the place or stood out to them.

During subsequent planning meetings which took place regularly between the second half of the spring term and the first part of the summer term, the class teacher and I discussed the concept of keeping a fieldwork journal throughout the research. During the planning stage the original idea was for the students to keep reflective journals during the field course and during the time they took part in the research. The concept was informed by the work of Punch (2012) and Walshe (2012). Much discussion took place around their format with the decision made to include some background geographical information about the place including a satellite image of the area and population figures. There was a section inside the front cover with guidelines about what the students could include in their journals. This would be a new experience for the students and the class teacher. Their value is recognised by Hamilton et al., (2013) in capturing the story of the participants in the research, especially through their ability to record immediate responses to situations. Indeed Hamilton et al. (2013) cautioned about the need for clear agreed parameters with the participants about the use of the content, especially if the students share personal insights.

It was decided the fieldwork notebooks would be given to the students in an A3 wallet folder, before the half-term, so they could look through the information if they so wished during the break. The resources included a copy of the Broadcaster newspaper, the free visitor guide to the Broads National Park. Additional material included a copy of an informative colourful booklet, *The Broads*, produced by cool places and green traveller and a copy of *The Broads*, a booklet marking the 25 year anniversary of the Broads National Park, 1989-2014 (www.broads-authority.gov.uk). In addition, the students were given a list of useful websites they could visit, if they wished to find out more about the area before their visit. The class teacher ensured each student in the class had a copy although it was entirely voluntary as to what extent they chose to use the resources.

For this unit of work, the students self-selected working groups. The aim was to provide opportunities for collaborative working with their peers to enable them to build and talk

through their shared understanding. At the same time, self-selected groups for fieldwork supported the health and safety element of taking the students out of school while providing a degree of autonomy to be able to experience and explore the place. In addition, Roberts (2013) recognised the benefits of group work to support students' conceptual understanding, which she acknowledged can take time. This is particularly relevant in this instance as place is recognised by Roberts (2013) as an abstract concept which can be more difficult to understand.

The fieldwork activities were designed to be incremental with layers of activities building the students' spatial knowledge of the study location. This structure provided the facility to support the implementation of the conceptual framework through increasing familiarity of the nature of a place. The students in this research were encouraged to choose a group sensory based investigation either following their own interest or developing one from a suggested list (see Appendix B) which was aimed to provide a stepping stone to a more autonomous style of enquiry framework. A copy of the students' fieldwork booklet is included in Appendix B. The students were encouraged to give some thought to their investigation outside of the class. This was a big step for the students to make on their own so consequently they were given a planning sheet to help to develop their ideas.

The planning sheet aimed to increase the students' awareness that they would be using their senses to guide their investigation. They were encouraged to find a group name to develop an esprit de coeur in terms of belonging to a group with a shared purpose. At the same time, being in a group with a shared purpose helped to signpost the students to consider what equipment they would need to carry out their investigation. The activity required a level of meta-thinking in terms of asking the students to have an input into planning their own research. This extended to asking the students to identify risks they might face and how they would manage them.

It was planned that the students would be given an individual disposable camera on arrival at the fieldwork destination, while they were waiting for their guided boat tour, to record memorable features about the place. During the rest of the day the students would be exploring and experiencing the place, through walking around in their groups.

After lunch they were to sit around on a raised part of the boardwalk in the park, to listen to the happenings in their surroundings and note down any sounds they could hear. At

the same time, they would be encouraged to note down words and phrases to describe what they saw and felt about being in the place. These words could be subsequently used to write a haiku and or an acronym about the place. They would be free for the rest of the afternoon to explore the place and collect information for their group investigation.

4.5i Methods of data collection

According to Stake (1995) there is no clear point when data collection begins. However, he noted cerebral observation gathering started from impressions and observations made as soon as the researcher becomes acquainted with the case context, although a lot of this is never written down (Stake, 1995). Consequently Stake (1995) identified observation as a key means of data collection, which he felt was enhanced by relying on experience and a degree of scepticism. While Merriam (1998) identified three key methods that were compatible with qualitative research, which she felt lent themselves to descriptive methods. These included observations from which were developed reflective notes, semi-structured interviews and use of documentation of the students' activities. These are the main means of data collection in this research with the artefacts of students being interpreted as extracts from students' representations. Each of which would provide evidence to contribute towards an enriched triangulated source of evidence during the discussion of the results. The use of more than one source of evidence is felt by Yin (2014) to provide a convincing argument especially when they converge. One of the advantages of a qualitative case study is the ability to value insights from single instances from which Stake (1995) felt insights could emerge. This is a further recommendation for choosing Stake's case study approach when gathering data from a single case study.

The benefits of searching for meaning from more than one source of data are that it allows for reflective interpretations and gives a chance to view information in different formats. This could potentially provide rich data from which 'thick' descriptions can be made, which as Merriam (1998) suggested, give a holistic interpretation of the phenomena and processes at work within the case study. Merriam (1998) recognised that data collection is subject to individual fallacies, biases and possible missed chances. To this Hamilton et al., (2013) added possible problems arising from coping with a variety

of types of information. Nevertheless, pursuing a case study allows a degree of flexibility to change direction if circumstances alter.

4.5ii Reflective observations and fieldnotes

When carrying out observations, Hamilton et al., (2013) suggested it is a good idea to have previously observed the participants before the start of the research, so they reach a stage whereby they become impervious to being observed. There is considerable overlap between making observations and composing reflective fieldnotes. The understanding of fieldnotes is informed by the work of Emerson, Fretz and Shaw (2011): “[W]riting fieldnotes processes experience, not only through a researcher’s attention in the field, but also through a writer’s memory and compositional choices at the desk” (Emerson et al., 2011, p.127). This suggested an element of synthesis, selection and careful consideration can go into the composition of fieldnotes. Consequently, it required the researcher to reflect upon what has been observed, before putting pen to paper.

However, Hamilton et al., (2013) raised the conundrum of the ethics if an observer witnessed inappropriate student behaviour, without having full knowledge about the history of individual pupils. It is a difficult situation, as the researcher is a guest in the teacher’s classroom. Nevertheless, scenarios could be raised for constructive discussion afterwards through a positive deconstruction of the nature of the situation and how it may influence the research. It is essential to build a trusting positive relationship between the class teacher and the researcher, to support their confidence to try a different way of teaching. If the class teacher felt their personal practice was in anyway under scrutiny, when the focus of the researcher’s presence is on the research, the relationship and potential successful implementation of the proposed curriculum innovation could be put in jeopardy. At the end of the day the research focus is guided by the conceptual framework relating to investigating an alternative place pedagogy.

During the process of observing students in a busy classroom, it is not possible to see and witness everything that is taking place. The small size of the room where the students’ lessons took place, made an outsider’s presence quite evident. Furthermore, it may not be possible to make written notes when there is no space to do so in private, without someone being able to read what is being written. On ethical grounds, it was felt appropriate to only comment on those members of the class who had agreed to participate in the research.

Observing activities within the classroom would need careful consideration of existing power differentials between the various groups and how to ethically record the everyday classroom workings. At the same time Emerton et al., (2011) raised awareness of what lens could be applied to the class observations: “[P]oints of view, then, is the writing perspective (and techniques) through which a story gets told, through whose view the characters, actions, setting, and events are presented to the reader” (Emerton et al., 2011, p.94). This confirms the idea that any observations are viewed, interpreted and recorded through the lens of the observer, which has been discussed in the previous chapter in relation to positionalities. At the same time, it reinforces the fact that any observations will be selective, according to what has caught the researcher’s attention or is within their field of vision. However, it is not possible to be omnipresent within the classroom, so again only a snapshot of the proceedings and activities will ever be recorded. This is emphasised during the write-up which Emerson et al., (2011) noted will reflect the researcher’s interpreted understanding and selection of what they choose to record. Consequently, the process of creating fieldnotes, is selective, in terms of what the researcher feels will be of interest to the reader (Emerson et al., 2011). This reinforced the need for other forms of data collection to create a more rounded picture of the research activity.

Insights take time to evolve which is not often fully appreciated: “[I]n many situations, as a practical matter, retrospective reinterpretations are useful and unavoidable” (Emerson et al., 2011, p.107). Interestingly Emerson et al., (2011) considered the whole process of writing-up is further fraught with difficulties when the selected content is confined to a written narrative based around words, which are filtered by the researcher’s memory and ability to express what they wish to communicate. Here Emerson et al. (2011) offer a cautionary note about the persuasive potential of fieldnotes, so care should be taken to ensure they are an accurate interpretation of events, bearing in mind they might be written reflectively. Indeed, Emerson et al. (2011) remarked that it does not matter if there is only one example of a feature, it is still noteworthy, and if further examples emerge, they can be examined for similarities or differences.

A possible way of overcoming a partial view, would be to video or record the class or selected groups. However, this was not possible as several students spread across all the groups had not agreed to be videoed or recorded.

4.5iii Semi-structured interviews

The use of interviews is perceived to provide a key source of information for case studies (Yin, 2014) and is a popular means of collecting qualitative data (Merriam, 1998).

According to Merriam (1998) interviews provide information about how the participants viewed the world. In this instance, the students and how they felt about the place they explored and experienced through using their senses. Stake (1995) recognised interviews can be informative but at the same time he acknowledged obtaining a useful interview can be problematic. Moreover Merriam (1998) argued that interviewing is the main source of collecting in-depth case study information with Hamilton et al., (2013) suggesting: “[I]nterviews can be time consuming to arrange, carry out and to analyse and yet interviews can also provide some of the richest data of your research project” (Hamilton et al., 2013, p.104). These recommendations ensured interviews, especially semi-structured ones, which can be more flexible, form a pillar of the data collection methods of this case study. However, these suggestions come with an awareness that their course may not be straightforward. The interview with the class teacher has the potential to be valuable especially as he was part of the previous year’s more traditional approach and would be able to make informed comparisons with the research activities. On another level it would be useful as he knew his students, so could add insightful information about how they had interacted with the research approach.

The quality of data gained will be influenced by the nature of the questions, with semi-structured interviews considered to be one of the most popular techniques (Merriam, 1998). However, Hamilton et al. (2013) suggested having some agreed questions or question areas can make comparison between interviews easier and help with subsequent data analysis. At the same time Merriam (1998) noted the value of the interview depends on the interviewer being sufficiently knowledgeable about the subject matter while asking suitably worded questions, that ensures the interviewee is clear about their purpose. A copy of the interview questions that were initially trialled with an educationalist beforehand, to try to reduce the incidence of closed and leading questions, and is available in Appendix C. The information generated would help to answer research questions 1 and 2. Stake (1995) felt trialling questions beforehand through carrying out a pilot survey would try to reduce the inclusion of questions that lead to single word responses. These questions were trialled on a member of the education department beforehand. However, Stake (1995) raised awareness that it is unlikely that the questions

and interview would unfold in the same way because of the unique experiences of each group. Consequently, it would be impossible to replicate the information, which was gathered at the end of the research. This increased the need for recording the students, which would only be possible with ethical clearance. This added to the unique nature of the research and the impossibility of reproducing the information (Merriam, 1998), in terms of the context of the students, the unique way in which they developed their conceptual understanding through layers of place experiences and follow-up activities.

The students' questions were designed to guide them into and through the interview, by starting with more concrete questions, to help them to feel more comfortable with being interviewed. A copy of the suggested questions is included in Appendix C. These were designed to follow Merriam's (1998) advice and include a mixture of structured and open questions. The more open questions are included later-on in the interview when the students have settled into the interview and hopefully will be more comfortable about talking about their research experiences. The students were between 13 and 14 years old and not used to being interviewed, so as a researcher, I was unsure as to whether they would be willing to talk expansively about their experiences from taking part in the research.

The interviews were scheduled to occur during their normal geography lesson time towards the end of their work on place. It was planned that the students would be taken out of their geography lesson for the interviews and I was given the instructions that they should only last for about 10 minutes. Interviews Hamilton et al. (2013) suggested required a need to multi-task to ensure it followed a relevant pathway. At the same time, it needed to be supportive to ensure there was a smooth transfer between the different topics being discussed, while recording the interview. It was a multitasking experience, one that would make it difficult as a researcher to make notes during the interview. Consequently, any additional thoughts were written afterwards which gave an opportunity to reflect over the whole process.

At the same time, there is always going to be a power differential between my position as a researcher and the students as participants, which would not create a level playing field for the interview scenario. Both parties would as Merriam (1998) cautioned, bring their own positionalities to the situation. However, from the outset the aim was to bear all these factors in mind and follow Merriam's (1998) advice to ensure a good rapport was

established, by being respectful of the students and their work. The decision to have the students' posters present during the interview was to act as an aide-memoire and give them something to talk about if a prompt was required. The posters gave an opportunity to discuss any particularly interesting features and provided an opportunity for photo-elicitation from the students' photographs included in their posters. The idea of taking photographs into interviews is acknowledged by Rose (2016) to be accepted practice in the social sciences.

The photographs in the posters were taken by the students themselves so should have meaning for them. Photo-elicitation was recognised by Rose (2016) to stimulate more detailed discussions than other types of interviews. Using photo-elicitation as a method Rose (2016) explained could occur because the interviewee was the 'expert' if they had taken the photographs for themselves. Such an approach would be sympathetic with the ethos of this research in terms of involving the students in shaping the course of their research. At the same time photographs were recognised by Rose (2016) to be able to capture the sensory nature a place, although not sound. This comment was made in relation to research into how people relate to urban landscapes (Rose, 2016) but it could be applied to this research into more 'natural' and manmade environments. During their fieldwork, the students encountered the nonhuman environment, so this would provide an opportunity to stimulate discussions about their reactions to local wildlife if there was time.

4.5iv Examples of students' work

The students understanding of place displayed in their work emerged from following a constructivist approach. This is particularly evident in this study where the students had developed their place understanding and research data from having embodied sensory place experiences in their fieldwork location. Such an interpretation of the perception of sensory experiences is explained by Stake:

Human construction of knowledge appears to begin with sensory experience of external stimuli. Even in the beginning, these sensations are immediately given personal meaning. Although originating in outside action, only the inside interpretation is known. As far as we can tell, nothing about the stimulus is registered in awareness and memory other than our interpretations of it. No aspects of knowledge are purely of the external world, devoid of human construction (Stake, 1995, p.100).

However, as Stake (1995) explained the students' sensory experiences in this research were personal and originally assisted by giving each student a camera to record their own sensory interpretations of being in the place. Stake's (1995) comments raise awareness that any external stimulus, in this instance the original point of interest in the external environment will have passed through their own personal lens from which they constructed meaning. Stake (1995) continued the development of these ideas by likening the process to the development of 'three realities' from the original interpretation of the initial point of interest, to their interpretation and lastly to the integration of these ideas within existing thinking about the matter. When transposed to this study these realities could be likened to incremental layers of understanding which contribute to the students' development of their conceptualisation of place. These ideas have grown from the students' connection with a feature in the external fieldwork environment to its subsequent synthesis and connection with their existing understanding. Consequently, the methodology has been designed to facilitate this process which can be examined during the students' interviews. In giving the students an opportunity to articulate these processes it could stimulate an understanding of the connection between these activities which will be unique to each student. The idea of building layers of understanding from encountering a variety of place information and experiences has relevance for research question 3 if a palimpsest is interpreted as an analogy for incremental knowledge.

The original brief given to the students was to take photographs of features that they felt were representative of the place. The aim of the photographs was to provide artefacts to create a sense of place. Consequently, these processes helped to make their posters into unique objects from which personally recollections could be extracted during their interviews. In view of all the layers of activities involved in taking the photographs it increased the potential of using their posters as a resource for photo-elicitation.

The work was developed within the broad framework of the revised key stage 3 programmes of study (DfE, 2013) which Rawling (2016) suggested, provided an opportunity for students to creatively build their comprehension. Besides creating a group presentation, the students used their photographs to create A3 posters to convey a sense of place and wrote postcards. In addition, the photographs acted as artefacts and aide-memoires around which the students composed a poem, either a haiku or acronym about their sense of being in the place. Another purpose of the photographs was to subsequently provide a means of allowing the students to reflectively recreate their

personal fieldwork experiences to provide the means to support the students to create deeper place related follow-up work.

Somerville (2010) included poetry within her broad definition of the use of stories, to convey information about a place. There is a recognised tradition that poetry can reflect a sense of being in place, and record a deeper place relationship (Sheers, 2008). Poetry was used by Sheers to express his embodied feelings from being outside and captured them in words through writing poetry: “[O]ne of the most significant shared qualities of a landscape and a poem that works (in both senses of the word) on us is their ability to ‘situate’ us by translating the abstract word of thought and feeling into a physical language” (Sheers, 2008, p.173). Here Sheers (2008) suggested that a poem provided a suitable genre to record place feelings and complete a dialogic place experience. To convey such a feeling Sheers (2008) recognised the multiple place sensations that are perceived while in a place and can be captured and used to inform the writing of a poem. He felt the use of carefully chosen words could create more meaning than was possible in an extensive piece of writing and at the same convey conceptual meaning about a place (Sheers, 2008). Indeed, he continued his argument for the use of poetry to express his reflections about a place, because of its interpretive potential, which he felt sets it apart from the use of images on their own.

Poetry was recognised by Rawling (2010) as a powerful tool to for young people to connect with a place and express their aesthetic place feelings. Similarly, Somerville (2010) was aiming to achieve, to engage young people in a different way of studying place, such that they will come to care and know it afresh. To illustrate her point Rawling (2010) drew on the work of four poets about the River Severn, to showcase the potential of the genre for expressing sensory place connections and providing a route for young people to achieve this place relationship.

In addition, Andrews (2018) highlighted the potential of poetry for conveying sensory place findings: “[P]oetry, among its many characteristics, arises from intensity. That intensity is not always intensity of feeling; it can also be intensity of looking, of hearing, of sensing some framed experience, of thought, of memory – or a combination of any or all of the three” (Andrews, 2018, p.17). In this description of the potential of poetry to communicate a deep place connection, he suggested the genre could help to facilitate engaging young people with their surroundings. This interpretation of poetry made it

into a natural corollary to express sensory and affective place connections. The link between the study of place in geography and its representation in poetry, is further cemented through Andrews' (2018) recognition that poetry has its origins in the real world, which in this study of place included its living and non-living components in their natural environment studied through geography fieldwork. Poetry offers the means of expressing an embodied place connection through the careful choice of words and the use of metaphor.

At the same time in presenting a poem alongside other modal means, which in this study included the use of photographs and drawings, could fulfil this acknowledged tradition in poetry (Andrews, 2018). The students were encouraged to be creative in their choice of how to represent their findings about a place.

4.6 Data analysis

The researcher plays a key role as the interpreter of the gathered information in case study research and Stake (1995) referred to analysis as a form of deconstruction. According to Merriam (1998) the analysis of qualitative data required a search for themes, which is a lengthy iterative process (Hamilton et al., 2013), one that required the data to be continually refined. The outcome of any analysis is unknown at the outset and needs to be started in the field (Merriam, 1998). Furthermore, she considered the process could be supported through memo writing and coding (Merriam, 1998). Coding is interpreted by Miles et al., (2014) as a form of analysis, through the emphasis that is placed on finding meaning from the data. It is a reductive process, one which at the same time is heuristic (Miles et al., 2014).

Coding is envisaged to provide insights at two levels, firstly in the form of information and secondly from interpretative constructed statements (Merriam, 1998). These techniques will be applied to the interpretation of the three main sources of information, namely observations, semi-structured interviews and examples of students' work.

However, each data source will be interpreted in the most appropriate way to suit the information collected. Analysis of the case study data aims to be sympathetic with Stake's (1995) interpretation of analysis: "[A]nalysis essentially means taking something apart" (Stake, 1995, p.71). Commensurate with qualitative data and research Stake (1995) discussed the idea of creating assertions from the findings, based on the unique features of the working of a case study. This interpretation of analysis would allow for a more

situated contextual interpretation that has the potential to integrate nuanced understandings from being present during the day to day happenings of the research. This would provide a means of “taking something apart” (Stake, 1995, p.71) following Stake’s interpretation of analysis and situating it within the data to add to the unique case study understanding. From these processes, an overall impression will be gained of the whole investigation, to inform a later discussion, one that is not too generalised. This stage will be reached through the triangulation of the results from the different sources of data.

4.6i Analysis of the observations and reflective vignettes

The following advice from Emerson et al., (2011) helped to inform an understanding of the on-going nature of the analysis process in terms of raising awareness that the original recognition and identification of features to be recorded, was as an initial form of analysis (Emerson et al., 2011). Consequently, subsequent analysis provided another level or layer of selection and reflection. The argument for including selected examples of observed student reactions to being in place or engaging with the study of a place, was to provide another insight and dimension into how the students engaged with the activities. This is accentuated by Emerson et al., (2011) who felt it could add weight to the identification of emerging themes, even if from a single instance or example student behaviour or reactions, which is not recorded elsewhere. The advice being followed from Emerson et al., (2011) that has shaped the analysis of observations is to be mindful of individual events and trends that contribute to building an insightful understanding of the students’ reaction to this place research. Each insight is to be valued to build a growing picture of how the students responded to the different activities and situations.

However to take the analysis a step further, there is a need to reflect upon the information and search for additional meaning: “[A]nalysis is less a matter of something emerging from the data, of simply finding what is there; rather, it is, more fundamentally, a process of creating what is there by constantly thinking about the import of previously recorded events and meanings” (Emerson et al., 2011, p.199). Here Emerson et al. are suggesting it is necessary to keep reflecting over fieldnotes, which may unearth fresh interpretations, clearly establishing the process to be an iterative one. These insights could emerge through making connections back to other happenings or from making fresh connections. They suggest these could surface at any point, not necessarily at the

end. This cognitive process Emerson et al. (2011) suggest can lead to creating a theory, through identifying emerging themes with the relevant data to justify making fresh connections. However, as Emerson et al. (2011) remarked, it helps to situate the writer in the world that is being described as opposed to apart from it. The whole idea of deconstruction is sympathetic to examining case study findings; as Stake (1995) explained it needs contextualising with situated understanding to ensure it sits within a qualitative analysis. Consequently, any fieldnotes and jottings were carefully re-read in the search for information about how the students reacted to being involved with a different approach to the study of place, during the preparation, fieldwork and follow-up activities.

4.6ii Analysis of the semi-structured interviews

The analysis of the interviews took place through the transcribed words of the oral recordings, with the aim of providing insightful knowledge to contribute to theoretical understanding about an alternative place pedagogy. The interviews were first colour coded which was informed by the work of Saldaña (2016) and Miles, Huberman and Saldaña (2016) and led to emerging themes. A decision was made at the outset to manually process the data as Yin (2014) considered it could more readily support the identification of reflective meaning in relation to the research questions. Saldaña (2016) recommended manual coding for first time coders of small scale studies, using print-outs of interview transcripts which he felt gave the researcher more 'ownership' of the work. For the reason of having control over the work and having the facility to explore the information, as a researcher I felt it was necessary to increase my familiarity with the emerging knowledge and followed Saldaña's (2016) advice.

Stake (1995) expressed his scepticism about the whole process of coding: a further factor in my decision to manually process the data: "[W]hen the study is concluded, will our assertions be based on frequencies of contingent happenings or on narrative descriptions?" (Stake, 1995, p.29). Manually coding ensured I remained close to the data and could identify emerging themes across the different groups while at the same time being open to emerging instances of individual insights. This is a qualitative study, consequently it could be argued that manually coding might be easier to facilitate the identification of ways in which the students have engaged differently with the study of a place. In finding examples of how the students used their senses to engage with experiencing and exploring a place would be compatible with research question 1. The

exploration would be most useful to get a feel for how the students have engaged with the use of multimodality across the whole research, which is particularly relevant to research question 2. At the same time manual coding provided an opportunity to extrapolate nuanced understanding that might be missed through a computer technique that is diametrically opposed to the ethos of this study. Therefore, I am arguing for an interpretative means of using the interview transcripts to provide insights into how the students perceived they had interacted with their study of a place.

The data was initially coded to identify emerging ideas. Coding was carried out following Miles et al., 2014 interpretation of a code as a means of identifying and labelling groups of words with a similar meaning (Miles et al., 2014). This was followed by a second cycle of pattern coding which provided more general grouped thematic data (Merriam et al., 2014). Throughout there was an underlying search for insightful information that emerged from changes in voice tone or the emphasis given to words or phrases (Miles et al., 2014). These tonal emphasises were identified in the transcripts through using bold text (Hamilton et al., 2013). Having followed all these processes, the results were recorded in a tabular format, to help identify emerging patterns (Miles et al., 2014).

Following Saldaña's (2016) advice, several attempts were made at coding the data, using the lens of an identified coding method. In this instance, concept coding was chosen as it was felt to be appropriate for a small case study (Saldaña, 2016) focused around the geographical concept of place. However, Saldaña (2016) cautioned that the process is interpretative, which meant it could reflect the researcher's positionality. This is another reason for interview data being part of triangulated data to offset personal biases or interests in the search for understanding about the teaching of place carried out in this research.

4.6iii Using photographs to analyse student engagement

Photographic evidence was used as confirmation of student engagement during the fieldwork visit. Unfortunately, it was not possible to easily take photographs of students working in class as it would be intrusive as every member of a group had not agreed to be photographed. However, photographs of students interacting with their fieldwork location was found to be most helpful as another means of showing how they had explored and engaged with using their senses to study a place, as discussed in section 4.5iv about using examples of the students' work. The inclusion of photographic evidence

of student engagement was felt to be sympathetic with a sensory place investigation in being an example of using their visual sense. The photographs provided visual evidence of student engagement while at the same time provided insightful information about the nature of the stimuli that had captured the students' interest.

Photographs added another layer of understanding to augment the words used in the interviews. In addition, photography was felt to be an appropriate modal means of communicating information into a study which incorporated multimodality in the investigation. The value of the visual evidence was felt too great not to be included, especially in terms of showing how the students had engaged with the fieldwork. The analysis included examining the students' bodily positions to demonstrate the level of concentration and engagement with their subject matter. Interestingly Somerville (2015) used photographic evidence of young children being immersed in an activity while playing and exploring a local place. The visual impact of their total absorption in their surroundings was added by Somerville (2015) to her written analysis especially concentrating on the way in which it captured affective place connections.

Consequently, building on Somerville's (2015) use of photographic evidence to support her analysis of young children being absorbed with their in-place activities, I make a case here for the inclusion of photographic evidence of student engagement because of its facility to convey meaning in such a way that would be difficult to express through words. The pose and gestures of the students provided information about the students' engagement with their study of the place.

4.6iv Analysis of the students' work

The information produced by the students has been constructed and synthesised from their experiential sensory place understandings. The students used the photographs they took with individual disposable cameras to create an A3 poster, to generate a sense of place. The students' posters will be analysed for the format, content and way in which they have expressed their unique sense of place. The students will be working in the same group throughout the whole process and would provide a group presentation about the data they chose to collect during their afternoon place exploration. These methods are sympathetic with those employed in the Australian *Love Your Lagoons* (Somerville et al., 2015) project with their use of photographs, students' work and semi-structured interviews.

The nature of the work produced will be of a visual nature and Rose (2003) recognised the discipline's lack of an identified means of analysing them. This led my search to other areas to try to establish a means of analysing them. Firstly Yin (2016) suggested memo writing, with the information being later used to identify common themes and concepts. This information could be cross-referenced to identify any common patterns emerging across all the posters, forming what Yin (2016) would consider to be a case study data base. However, the format of this research is qualitative, so there is scope to value unique insights which could suggest alternative routes. This has resulted in incorporating the questions Somerville (2015) used to analyse A3 presentations by younger Year 6 children to record their reflections on visiting Narran Lakes in north-west New South Wales, Australia, described as place learning maps. Here Somerville (2015) examined the format of the posters in terms of considering the nature of the central feature, how the images were arranged and whether there was any form of connection between the images. This provided a tentative checklist for examining the posters in terms of considering the layout, nature of the focal image and interrelationships between features. The following questions were used by Somerville (2015) to inform her analysis of the students' place learning maps they produced after their visit to the Morwell River wetlands. They have been included to discuss their possible relevance in informing the analysis of the Year 9 students' geography posters.

What is the central image?

How are the images arranged spatially?

What is the relationship between the images?

What is the relationship between the image and text? (Somerville, 2015, p.75).

Somerville (2015) found these questions guided her investigation of the how the pupils' connections between their images and written narrative. The central image was analysed as it was assumed it had special significance to be afforded its central position. Each of the posters chosen for interpretation included a separate narrative about additional relevant features like the use of colour or any means of linking the images and the text. The A3 sheets used in Somerville's (2015) analysis and the students' A3 posters in this research were both developed from the students having had an embodied sensory experience and followed from a place visit. However, the features that were felt to be transferable to guiding the analysis of these similar activities included identifying the

central image which was a focal point of interest. Other useful indicators included identifying if the students had made any attempt to demonstrate interrelationships between the different images and content of their posters. The individual nature of the design and format of the posters in this research meant searching for guidance from elsewhere which led to multimodality and the work of Kress (2010, 2014) and Jewitt et al., (2014).

Therefore, the route taken by Somerville (2015) to analyse the place learning maps can only provide a tentative guide line to examining the layout and format of the posters because of the different context. This is particularly the case in this research where the students' have been encouraged to explore their own means of creatively representing their findings in line with Article 13 of the United Nations Conventions on the Rights of the Child (UNCRC, 1989). Nevertheless Somerville (2015) recognised emerging insights from the students having experienced an embodied place awareness of their surroundings. Somerville (2015) subsequently chose a selection of four of the pupils' pieces of work to analyse. This course of action will be followed here with an analysis of a selection of the students' sense of place posters.

The next point of call for the tools to examine the posters was multimodality, where the work of Kress (2010, 2014) has particularly informed my understanding and appreciation of its facility to support the creation of meaning which will be examined in 4.6vii.

Therefore, the students' posters were analysed through examining their individual format concentrating on their design, layout, use of intermodal means of creating understanding. The individual photographs varied in quality, having been in the main part taken with disposable cameras, which did restrict the students' ability to focus in on close-up shots of chosen features. However, there was a still an opportunity to examine what the students had decided to engage with and the tools they had used to identify and share these chosen focused features with their audience. Consequently, the analysis required the use of multimodal tools to decipher the individual stories and interpretations of a sense of place. Multimodal insights into creating meaning proved to be essential given the nature of the posters which were primarily visual with no clear entry point. At the same time, it meant that each poster was inherently creative, so a more systematic replicable form of analysis was not felt to be sympathetic with a qualitative study. Nevertheless, the analysis of the case study is guided by the work of Stake (1995) who

advised a researcher to search out examples of unique understanding while not forgetting to look for any signs of emerging common patterns across the whole data.

4.6v Analysis of poetry

All students were asked to write a haiku and an acronym to reflect their sense of place. These pieces of poetry were collected and a selection of these will be examined for the ways in which this form managed to convey a place connection. This was guided by Rawling's (2010) recognition of the potential of poetry to engender affective place relations and as a means of connecting pupils with places and foster insightful knowledge but no mention was made of how to analyse the findings. Consequently, it meant looking elsewhere for guidance which led to the work of Andrews (2018) that included the link between multimodality and poetry. At the same time the nature of the students' comments will be interpreted to establish whether having studied the place through having a sensory embodied presence has in anyway created signs of establishing a deeper place awareness. One of the key features that has been taken from Andrews' (2018) work related to the ability of poetry to capture the idea of movement. In this study of place, in which the students moved around their study location and in the process observed movements in their surroundings, this could be evidenced through active verbs. This is particularly relevant to Massey's (2005a) view of place as a spatio-temporal event in which she is critical of recording a sense of stasis. The analysis will be looking for any instances where the students have managed to capture a sense of movement and in the process represented a dynamic sense of place. However, unlike a case study, Massey's (2005a) interpretation of place is not bounded, but interactive. Through the introduction of movement, there is a suggestion that the process is an on-going one, which poetry has the potential to capture.

Bearing in mind the focus of the research, an alternative sensory place investigation, the poems will be analysed for any ways in which the students have referred to their senses in the poems. In addition, from a geographical perspective the poems will be analysed to establish the nature of the objects the students have engaged with. This would allow for a broad range of features bearing in mind Massey's (2005a) definition of place with its multifarious human and nonhuman elements.

In view of the short nature of the haikus, it would be difficult to convey meaning through telling a story. However, there was more potential to tell a story using acronyms based

around longer words like The Broads and Wroxham. In these instances, there is an opportunity to explore whether the information provided evidence of a growing awareness of the place and its story. It will be interesting to examine whether the students introduce any controversial geographical issues like bank erosion.

The arrangement of the poems will be analysed to establish whether the inclusion of the students' photographs added to the ability to convey a sense of place. In addition, the nature of any accompanying photographs or images will be examined to establish whether they complement or add meaning to the poems. The analysis will explore whether use has been made of the related photographs to support understanding of the place, conveyed in the textual content of the poems. There are similarities between the recognition Andrews (2018) has given to the liminal space between modes for creating meaning to that Somerville's (1999) gave to the liminal spaces between different modes for stimulating fresh understanding. The nature of the physical framing of the space of the poem will be examined to see if it adds meaning to the poem. The use of any other modal means of enhancing the layout of the poem will be examined, for example the lines which separate information and act as frames. The choice of words will be analysed to explore if metaphors have been used to emphasise meaning.

4.6vi Analysis of a moving image

One group opted to create a video of their study of a place. When considering how to interpret it, Lorimer (2010) recognised that geography does not have the necessary analytical skills, which led the search to multimodality. However, as Jewitt (2012) recognised there is a dearth of published material about the use of video making in school. Consequently, there was a need to search for the tools to interpret the students' video which went beyond geography to multimodality and the work of Jewitt (2012) and the Burn et al., (2003) as being a documentary about a place. Here Jewitt (2012) identified two key factors when interpreting a video namely is there an intended audience and the context of its construction. In this instance the video is produced with a clear purpose, to create a sense of place, so could be categorised as a documentary, with an intended audience of the rest of the class. The context was part of a group presentation to create a sense of place.

Burn (2014) provided a route into examining the video content by suggesting the digital imagery could be broken up and viewed as individual frames whose content is then

examined. This route into video analysis would be sympathetic with Kress et al.'s (2006) view that as videos have been visually produced, they need analytical tools which can examine their visual content. These comments reinforced the suitability of the use of still frames to analyse the video. The video still will be examined to show the angle of gaze of the person making the videoing (Burn, 2014). Consequently, when examining the content of the video stills Burn (2014) likened the activity to scene setting activities in the theatre, which include examining the lighting and degree of action. These activities could be transposed to establishing a sense of place. In addition, Burn (2014) referred to examining the content of the video stills which he perceived to be spatio-temporal contexts, a similar interpretation to Massey's (2005a) view of place, except here the digital content could be changed through editing. This provided the students with the means of manipulation to create a different story of a place. Consequently, when viewing the overall film, there needs to be an element of scepticism and vigilance of the extent to which "the grammar of the moving image" (Burn, 2014, p.376) in terms of the lighting and intensity of colour have been manipulated. These activities are described as the video's "*functional load*" (Burn et al., 2003, p.26, italic in original). In other words, there is a need to question what lens is being applied to interpret the story of place being portrayed. On another level the technical ability of the students could be analysed through interpreting the expertise displayed in their manipulation of the functional load. Other multimodal features that could be examined include sound or musical accompaniment and the use of text, if included. The interpretation started with the students' decision about which features caught their attention and how they decided to tell their unique story of the place. The presence of such features will be an indication of the level of student engagement in the activity.

However, Garrett (2010) raised awareness of how current technology provided the video editor with the means to manipulate time and space, through fast forwarding to change the tempo or the inclusion of still frames to accentuate a point. This could be extended to include the technique of focusing in on selected features. The analysis needs to consider whether any of these tools have been used to enhance the video story the students told of the place. It is a geographical video so care needs to be taken to examine the geographical messages that are being conveyed. The overall cumulative effect of the video could be ascertained through viewing the video in total. This whole video viewing would allow for an examination of its cohesive nature, which could examine whether

each frame effortlessly flowed into the next (Bezemer et al., 2016). In addition, Bezemer et al., (2016) felt time should be spent examining the layout or spatial organisation of each frame. Overall the field of multimodality provides the tools to analyse the students' geographical video story of a place.

4.6vii Using multimodality to analyse presentations

A mode is interpreted here through the work of Kress (2014) to include the social and cultural means of creating meaning. Multimodality provided a way to interpret different ways of making meaning and consider interrelationships between them (Jewitt, 2014). In addition, there is a recognition that language is only one modal means of communication which can exist alongside other modes to create understanding, all of which are viewed as having equal significance (Jewitt, 2014). This is contrary to traditional western means of communication, where language is the main form of creating meaning (Jewitt, 2014). It is in searching out the ways in which interaction between different modes takes place, that Jewitt (2014) considered deeper insights can be found. Consequently, this research will aim to identify and interpret interactions between different modes and how they have been used to represent findings, to support student learning about place.

Kress (2014) raised awareness of the rich variety of modal tools available for the students to use to create meaning. These extend beyond writing, whose format differs between cultures, to encompass features like images and layout to represent information to create the meaning (Kress, 2014). For example, the use of font, size and style can be utilised to create meaning, such instances are the result of conscious choices, which need to be recognised. The additional modal means to support such an exercise includes the use of shapes, lines, colour to enhance meaning (Kress, 2017). The analysis of the students' presentations aims to identify and interpret different multimodal means used by the students to create meaning in their presentations.

In addition, this search will aim to identify any ways in which the students have used modal means amongst themselves to support their ability to create meaning. Such a practice would be sympathetic with Kress's (2014) interpretation of a mode being socially and culturally constructed as a way of creating sense.

4.7 Ethics and informed consent

Ethical considerations have been apparent throughout the study from the initial stage of gaining access to take my research into school, to being given permission from the supervisory University Education Research Ethics Committee to carry out the research. Consequently, ethics permeated every level of the research from its execution, analysis to the presentation of the data. Ethics is interpreted here as relating to the integrity of the way in which the researcher conducts themselves throughout the research process, including how they interact with and respect the confidentiality of the participants. In this instance, the participants in the research were students, in a school context, who are under 18 and as such are identified as a vulnerable population, so required responsible consideration throughout the research process (Hamilton et al., 2013). In addition, the class teacher was a participant in agreeing to participate with his class in the research. A copy of the opt-in letters to participate in the research is included in Appendix A. This section will highlight ethical considerations that have shaped the trajectory of this research.

The first consideration related to gaining access to a school in order to carry out the research. This led to meeting a subject specialist geography teacher to ascertain whether the research could be integrated into a unit of Year 9 work on sustainable tourism, which included the study of a place. After an exploratory meeting with the Class Teacher, ethical clearance was applied for, to take the research into school and was approved by the University's Research Ethics Committee. At the same time, I applied for a Disclosure and Barring Service (DBS) Enhanced Certificate of clearance, in order to go into school and work with children. The school examined and agreed to disseminate the proposed letters asking for signed consent from the class teacher, students and their parents' permission to opt-in to participate in the research. The letters had previously been presented to the University Ethics Committee and gained approval. A copy of the opt-in letters to participate in the research for the Class Teacher, the students and their parents are in Appendix A.

The class teacher gave me a few minutes at the end of a geography lesson with the proposed group, to briefly outline the nature of my research, which I did with the aid of a power point presentation that included visual images. However due to the limited time slot, I ended up giving out the letters to the students and a copy for their parents, after

the bell signalling the end of the lesson. Unfortunately, time was tight in the busy school routine, which meant it was a very brief insight into the nature of the research. However, the students and the Class Teacher were assured of anonymity through pseudonyms and informed about the use of the research material. In addition, both parental and pupil signed consent was required for each student's information to be included in the research. The consent form included separate sections for indicating whether the students agreed to be photographed, videoed, interviewed, with the interview being recorded. Students were made aware that they could withdraw from the research at any point if they so wished. Consequently, I ended up with a large spread sheet with ticks and crosses where some students had indicated consent to be photographed but not to be interviewed or to take part in the research. However, those students who did not opt-in to participate in the research, all followed the same approach to the study of a place, as the study of place was a normal part of the class's geography curriculum.

Confidentiality of the school was maintained through the removal of its name from any included information. The identity of the students was anonymised through pseudonyms, with pupils being referred to as PA, PB etc, with the allocation of a letter not reflective of their alphabetical position in the register. Access to the analysed material was stored on the researcher's university and home computers, which were password protected. When any of the students' work was included it was referred to through the student's pseudonym. The identity of the school was anonymised in the research. It is my intention to share my findings in an ethical manner with those students and their parents who requested the information, on completion of my dissertation.

4.8 Summing up

There are clear indications of how the methods are to be used to introduce an alternative place pedagogy were qualitative and focused around the use of a case study. The sensory embodied place experience influenced how the fieldwork was to be studied and the students collected their data. This case study was conducted with a Year 9 geography class during their normal geography lessons. The place related data was collected incrementally by the students working in groups where they played a part in the planning of a group place investigation. The students were given individual disposable cameras to collect their own visual images of features they perceived were representative of the place.

The activities were planned to support the students to get to know their study location in different way, one which allowed for the students to develop an embodied place awareness. This would provide information to answer research question one. At the same time this sensory approach provided a catalyst for exploring different ways of representing the findings and allowed the students a chance to express their understanding of having been in the place. Nevertheless, it provided alternative ways of creating meaning. At the same time, it influenced the analytical framework and provided a lens to examine the multiple ways in which the students have represented their emplaced fieldwork experiences. This would provide example of student work to answer research question two.

The Venn diagram shown in Figure 2 provides a visual summary of the methodological approach, displaying the iterative pathway and component parts to creating case study insights into an alternative place pedagogy. These related to the case study, data collection and data analysis with an element of reflection and interaction between the component parts. The involvement of the students in the knowledge construction about their study location would be compatible with Hamilton et al.'s (2013) constructivist interpretation of ontology and epistemology. Provision for a constructivist approach is made through ensuring the students are working in groups and can discuss their peers in a social situation. The methods aim to support the students in developing their place knowledge through meeting with local experts like the tour guide, wildlife warden and talking to the members of the public. The incremental nature of activities and layered approach to knowledge construction about the study of place would provide information for answering research question three.

The Venn diagram shown in Figure 2 provides a visual summary of the methodological approach, displaying the iterative pathway and component parts to creating case study insights into an alternative place pedagogy. These related to the case study, data collection and data analysis with an element of reflection and interaction between the component parts.

On another level as a researcher understanding of the students' developing conceptual understanding of place was to be ascertained through a triangulated approach. This would include student observations and fieldnotes, semi-structured interviews, photographic evidence and use of exemplar student material they produced during

follow-up activities. These were interpreted in a variety of ways suitable to the mode of representation. Multimodality was explored to interpret the range of modal means used to create meaning which extended beyond solely being reliant on the use of the written word.

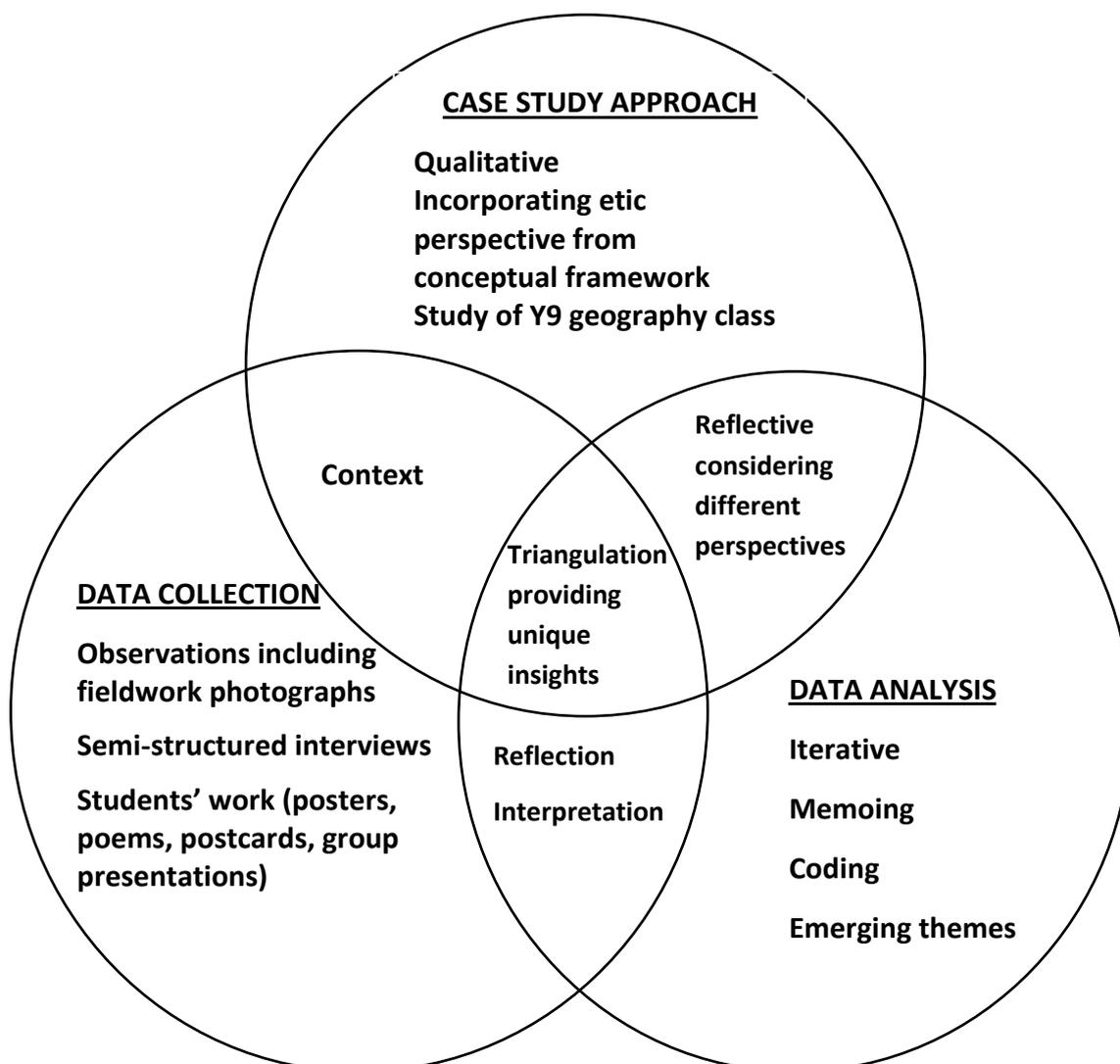


Figure 2. Visual summary of the methodology

Chapter 5

Findings and Analysis 1 – Pedagogy

5.1 Introduction

This chapter examines the consequences of implementing Somerville's (2010) facilitating place pedagogy and negotiating Massey's (2005a) interpretation of a place with its multifarious human and nonhuman trajectories. The key components of this unfolding story are the students, the class teacher, in the role of facilitating the introduction of this alternative place pedagogy and place knowledge. In so doing this interpretation of pedagogy has supported Lusted's (1986) argument for the significance of pedagogy as a 'process' or means to create understanding. Here, Lusted's (1986) interpretation of the pedagogy process forms the external structure of this pedagogic approach. This interpretation is applied by Somerville's (2010, Somerville et al., 2011) to her enabling place pedagogy. However, the pedagogic work undertaken and reported in this chapter, aimed to extend this approach to consider the implications for the students in this western secondary geography context.

The reason for this expansion was Somerville et al's., (2011) wish for students to engage with place in a different way, enabling them to tell different place stories. This is sympathetic with Massey's (2005a) desire to move beyond modernity's single story and support the emergence of multiple stories which suggest a more open future. In this pedagogy such an approach is integrated with the search for ways of representing place that go beyond the textual with its tendency to present the spatial as static (Massey, 2005) and explore ways of integrating time, to create a more dynamic concept of place.

The elements of place pedagogy that Somerville (2010) considered required particular attention from researchers and educators concerned relations with the natural world. This is an area of place study in geography that Massey (2005a) has already highlighted as noteworthy by its need for further development. Consequently, the pedagogy developed and implemented for this project investigated pedagogic means of providing a broader place connection. This was achieved by implementing Somerville's (2010) embodied sensory place presence alongside the development of layered viewpoints and knowledge about a specific place. To this layered and contextualised geographical study is added the importance of fieldwork. Fieldwork is key to the study of geography in contemporary classrooms but in the context of this study, it is explicitly linked to implementing

Somerville's enabling place pedagogy. Consequently, the aim of this chapter is to make the trajectory of this unfolding pedagogic approach with a Year 9 geography class as transparent as possible. It is very much shaped by the individual context of this case study and its fieldwork location.

Figure 3 has taken the conceptual framework and transformed it into a geographical place pedagogy which will act as a point of reference in providing an overview of how the research was implemented. Its role is to act as a map navigating a path through implementing the geographical place study with a secondary geography class.

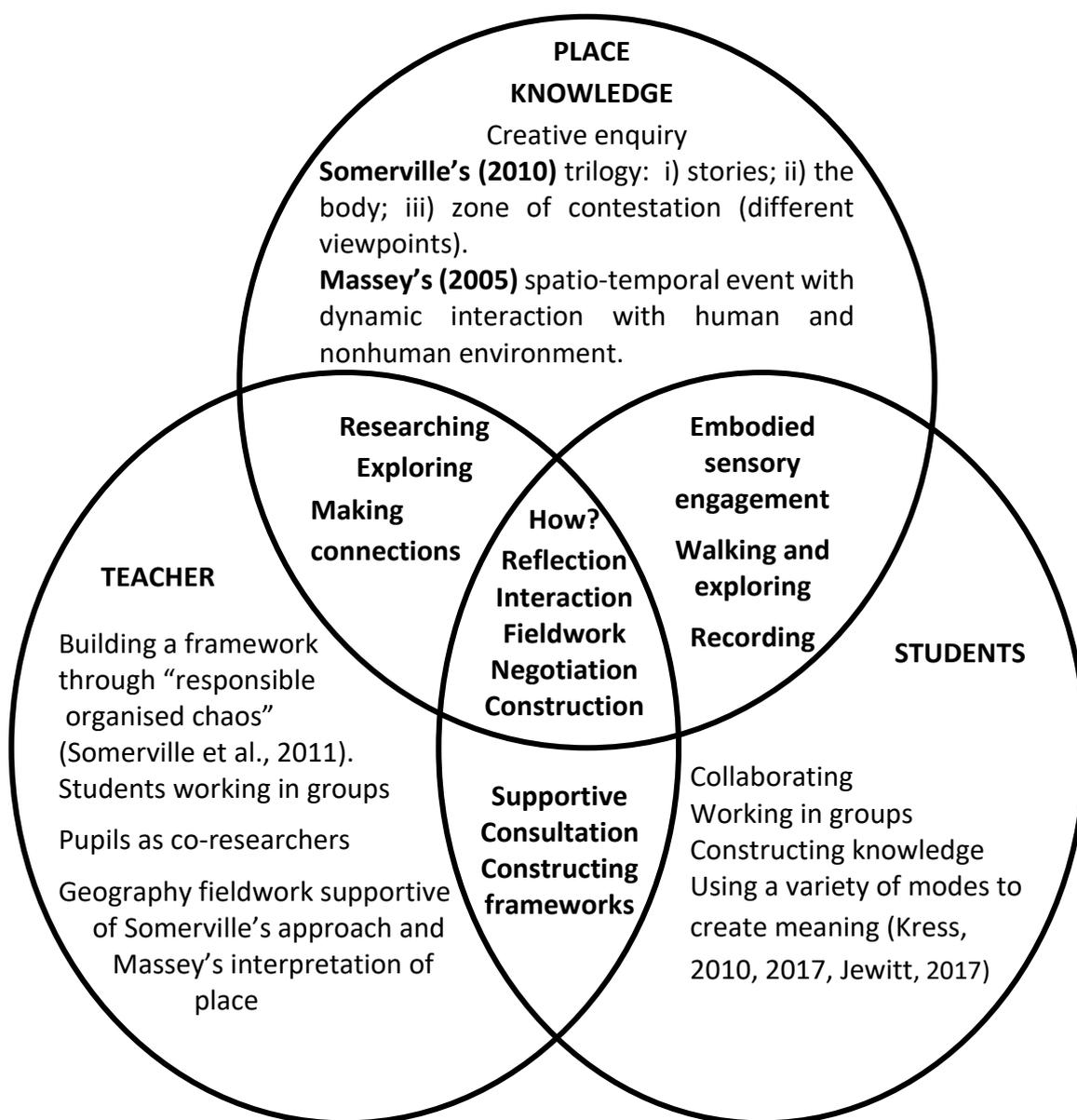


Figure 3. A geographical place pedagogy

Figure 3 uses the three key elements of Lusted's (1986) pedagogy, the teacher, the students and knowledge and examined how they interacted through Somerville et al.'s (2011) enabling place pedagogy. While Somerville et al. (2011) admitted to a sense of the uncertainty in taking this place pedagogy into primary schools where the outcome was unknown and referred to the process as a "*pedagogy of responsible uncertainty*" (Somerville et al., 2011, p.21, italics in original). The outcome of this research was unknown at the outset, but these data will fill identified gaps through examining the introduction of the combined pedagogic processes.

The following structure for the analysis of this geographical place pedagogy, starts with reflections on the initial introduction of the approach. This is followed by an examination of how the students used their senses to explore and understand the place. The whole process was guided by having an embodied place experience through walking and exploring. The activities involved the students in using cameras to connect with the place and record their sensory data. Finally, there is a reflective analysis of the whole pedagogic process.

5.2 Analysis of introducing a different approach

The introductory stage of planning and preparing the students to engage with their study location using their senses was a fresh approach for the class teacher and the students. In the case of the class teacher there had been months of meetings during and after school to discover ways of how this approach could be dovetailed into a study that was usually based on hypothesis testing. As a researcher I was conscious I was entering the class teacher's domain and in no way wished to dictate what should be done. Consequently, careful negotiation ensued to ensure we ended up with an approach that the class teacher was happy to introduce. It was integrated into an existing unit of work on the sustainability of tourism.

In preparation the students were given a folder full of resources to consult over half term to find out about their place of study. They came in a variety of modal formats to appeal to various ways in which students learn. Interestingly some students did use the materials but for others this step to independent preparation was outside their normal *modus operandi*. When interviewed it was apparent members of Group 7 had not consulted the material.

Researcher: Did you find any of the literature from the Broads Authority that you had in your folder to be of any use or not?

PA: Not really.

PB: I don't think we really used it.

PA: No, we didn't use it much because we were really focused on trying to get our results and take as many pictures of the place as we could. Maybe if we had more time, we could have looked into it a bit more.

Here the students were quite honest about their consideration of the usefulness of the research material. It suggests that this initial means of preparation of introducing the students to their area of study was not appropriate for all members of this age group. They were being asked to carry out independent research which was different from their usual preparation for fieldwork. However, these same students were 'focused' on their activities when they were in situ carrying out their fieldwork. This appears to support the importance of first-hand fieldwork experience for focusing students' attention on their study of a place.

This research required the students to use their senses to prepare a group enquiry about the study place and was aimed at creating a different place story than could be achieved from the previous numerical data collection from pre-determined sites. The aim was to give the students a fieldwork experience that was commensurate with Somerville's (2010) pedagogic approach, to provide them with sensory data they could subsequently draw upon to create different ways of representing their study location. This would support Rawling's (2011) argument that it is geography's responsibility to engage young people in a different way with their study of place, to create an education fit for the twenty-first century:

My contention is that school geography, as currently taught, encourages young people to focus primarily on descriptive and analytical approaches to the visual and material features of places – the observed landscape, the challenges which the physical/natural world provides, economic and social challenges – and to undervalue the poetic, the emotional and the spiritual dimensions of 'being in place.' If we have occasionally directed our attention to art, music, literature, it is only with the intention of using a picture, a piece of music or a poem as an extra resource to heighten description, to add information or to analyse past narratives and power relations, that is, to help us describe and explain places. While greater uses of literary and poetic approaches may be powerful aids in this respect, more significant for this chapter is the possibility of giving pupils a place experience, enhancing their awareness of what it means to be 'in place'

and, perhaps, reminding them of their connection with, and power to 'save' the planet (Rawling, 2011, p.66).

This analysis is looking for any ways in which this sensory embodied fieldwork experience could contribute to such an education, that would allow the students to engage and connect with their place of study in a different way. The engagement and connection are interpreted as being with the whole environment, human and nonhuman (Massey, 2005).

The first step in preparing the students for such a place experience using Somerville's et al.'s (2011) enabling place pedagogy was to ask them to complete a framework for their chosen means of carrying out a sensory place investigation. This involved the students stepping into the unknown and a period of responsible "organised chaos" (Somerville and Green, 2011, p.21) followed. This was a completely new experience for everyone involved and it required negotiating a way of enabling the students to feel they could carry out a place investigation, one that interested them, while providing the infrastructural means to ensure this was possible.

The students sat in their self-selected groups that the class teacher was happy with, to support this process. The reference to Somerville and Green's responsible "organised chaos" sprung to mind because of the amount of chattering during this planning stage. The 'chaos' came from producing a working framework. The following quote demonstrates a level of uncertainty is an integral part of connecting young people with their study of a place. "Pedagogy, that is the art and science of teaching and learning, participates in both the nature of art and of science, taking its bit of chaos through the frame of teaching learning activities and the technologies they employ" (Somerville and Green., 2011, p.21). This level of uncertainty would not normally occur with a fieldwork activity that is based around collecting numerical data from pre-designated locations but here the students were involved in selecting data collection locations. This opportunity created a possibility for fresh connections emerging. The uncertainty was compounded by the students working at the meta level of thinking, not having visited the place as a class. Not all the students in the class had previously visited the place, so this was taking a leap in the dark. However, the aim was to allow the students to use 'technologies' at least a disposable camera to facilitate their making sensory place connections. In so doing the means were being made available for the students to potentially engage with and understand their place of study in a different way. This pedagogic approach is very

different in asking and expecting the students to take an active role in planning their place research. This class teacher acknowledged the students would be having a different experience of being in place than would have occurred during their normal place investigation. This question followed on from his explanation of how the students, in being able to represent their findings in a variety of formats, was a departure from the norm.

Researcher: Um good. Could you please explain how the pupils taking part in the research studied so I should say the previous year's pupils when they went on their fieldtrip to Wroxham, Hoveton and the Broads, how was it different the way in which they studied the area with this year's group?

Class Teacher: "Er before we have always taken a fairly traditional route so given the question we looked at, sustainable tourism, is tourism sustainable and the class have been given very set tasks, traffic counts, pedestrian counts, environmental surveys and the students have been expected to walk around, gather the information, not really look at the wider picture, just look at, gather er specific statistical data. Take it back to the classroom and write it up as a traditional report with graphs, conclusion, hypothesis, um so the students weren't really getting a sense of place they were just getting er a snapshot of what was going on. So, there was lots of traffic, where there lots of people walking around, where were people from, were they tourists or were they local people so we were getting some uh as I said a statistical data set from one particular day which we wrote up. We didn't really evaluate how sustainable er by looking at photos and trying to explore a sense of place. We just looked at hard data if that makes sense.

Researcher: Um, yes.

Class Teacher: Sense of place was not really discussed in previous years.

Researcher: So, you feel as we have mentioned before that the pupils have experienced place differently this year than last year.

Class Teacher: 100% yeah, yeah, really, really differently. Um I think just being given the freedom to explore what they were interested in means that each one will have taken away far more from that day than previous years.

From the class teacher's viewpoint this research pointed to a departure from a traditional hypothesis testing approach. In so doing the class teacher believed this sensory pedagogic approach supported the students to extend their place exploration beyond pre-determined fixed locations to explore the place. This experience the class teacher believed, left the students with a legacy from their place experience. One reason suggested was the freedom afforded to these students, to follow their own interest in the study of place using their senses.

To reach this point the students had consulted with their fellow group members and decided what aspect of the place they wished to investigate, using their senses. They were supported in constructing this innovative approach through completing a planning sheet. This aimed to guide the students in building their own investigation through encouraging them to reflect over how they would carry out their research. It included considering what equipment would be required to carry out their intended investigation. The focus was on encouraging the students to take ownership of their work and to become independent investigators.

Three examples of students' completed planning sheets are included to demonstrate how the students engaged with this level of meta-thinking. The students had chosen an area of investigation that interested them for their group investigations. They had been given some suggestions which some students developed, while others followed their own existing area of interest. The students' names have been removed from the top of the planning sheets, hence the work does not have a title. The first planning sheet was completed by Group 4 whose aim was to create a "Cinematic Masterpiece". Completing the planning sheet was their first step along the route to becoming independent investigators. These were later perused by the class teacher and myself as the researcher to assess their feasibility and establish whether the materials were available to support their plans or if further direction was required.

Aim of your investigation (what are you wanting to find out?)	Find out how sustainable tourism is in Wroxham, by checking car usage, solar panel quantity, parks, greenery in the area, public transport. Boats (first solar powered)
How do you plan to carry out your investigation?	We plan on interviewing tourists/locals who understand sustainability in Wroxham and what they think could potentially change
What senses will you be using?	We will be primarily using sight and sound but that could change.
Where do you plan to collect your information?	National Park (Broads) Hoveton, Wroxham
What information will you be collecting?	Will be collecting sound recordings of tourists who visit there and why they go. Also different transportations used
Equipment required	Canon EOS 50D with 18-250mm macro ISM Nikon PS000 x86 optical zoom. Pen iPhone 5S Samsung Galaxy S4 Pencil
Health and safety issues you need to be aware of	River (Cold) Cars (Fast) Geese/Swans (Scary) Bees (Sting) Nettles (sting)
Ethical issues you need to be aware of when collecting information	Taking pictures of people Using flash on possibly endangered animals
How could you investigate how your data might have changed over time?	We could use data from the internet of how population of people and of animals have changed over time. Create a short time-lapse.
Any related information you need to research before you go on the field trip?	Best places to find rarer birds and insects so we can document them. Most visited places in Wroxham.
Ideas of how to represent your data	Video - Cinematic Masterpiece Interviews as an overview over the video footage of towns & river with CC's

Figure 4. Group 4's planning sheet.

Figure 4 demonstrated Group 4's planning was remarkably detailed and envisaged the nature of hazards they would need to negotiate while filming outside. They had started to connect with the natural world in their consideration of bee stings, stinging nettles and 'scary swans'. This was a departure from their normal approach of walking around footpaths to negotiate the human social and economic view of the place. They included the danger of fast-moving cars and from being near water, which was echoed by Group 6. These students were not attempting to sanitise the place but were thinking ahead so they could effectively negotiate a symbiotic relationship with their nonhuman other. In the process they had negotiated the multiple aspect of place that Massey (2005a) recognised. "The sheer fact of having to get on together; the fact that you cannot (even should you want to, and this itself should in no way be presumed) 'purify' spaces/places" (Massey, 2005a, pp. 141-2).

This group were prepared to meet the real world. Their appreciation of the nonhuman extended to ensuring they did not use flash photography on endangered species. This

points to a group, who appear to be relishing the opportunity to make a place video, that records and celebrates the natural aspect of the place. In addition, they are aiming to carry out research to investigate how people, as well as nature have changed in the place. This recognition of a transitory nonhuman population, is not as Massey (2005a) remarked a usual aspect of geographical place investigations: “[T]he nonhuman has its trajectories also and the event of place demands, no less than with humans, a politics of negotiation” (Massey, 2005a, p.160).

The students in this investigation are setting themselves a wider remit for their place investigations than would normally be encouraged during the collection of pre-determined data. This had emerged from the students being allowed to follow their own interests. In the process they would address Massey’s (2005a) recognition of the nonhuman presence and its contribution to an evolving place. This group is prepared to gather a broader range of data than would normally be the case and in the process engage with the place in a different way. Group 4 appeared to be well prepared to become place explorers aware of the multifarious aspects of the place, human and nonhuman. At the same time, they appeared to understand the ethical requirement of not taking photographs of people.

In being able to follow their own interests in nature and photography Group 4 had thought through the equipment they would need. They were prepared to bring in their own equipment at their own risk with the benefit that they would be familiar with how it worked. The planning sheet indicated the students had perceived the facility of using time lapse photography to condense a lot of footage into a short space of time. This suggested they had started to consider the temporal aspect of studying a place, in their comment about how people and animals had changed over time. Their motivation extended to a willingness to use the internet to source this information, which again suggested they would carry on research in their own time. This group appeared to be motivated and organised to engage with place in a different way, to tell a different place story. This would address Rawling’s (2011) identified gap in the discipline, of not giving students an experience of ‘being in place’.

The following planning sheet is from Group 6 who wanted to use their interests in art and photography to support their place study.

Aim of your investigation (what are you wanting to find out?)	To investigate Tourism in Hoveton, wroxham and the broads by showing a sense of place and tourist sustainability.
How do you plan to carry out your investigation?	With photography, videos, sound recording and sketches/watercolour.
What senses will you be using?	Sight, sound and touch.
Where do you plan to collect your information?	Town centre and along the river Bure.
What information will you be collecting?	photos, videos, sound recordings and sketches.
Equipment required	Professional digital camera, sound recorder, paper and pencil.
Health and safety issues you need to be aware of	wear a life jacket, don't swim in the water.
Ethical issues you need to be aware of when collecting information	Don't interview people who don't want to be interviewed, and don't film or take pictures of the public.
How could you investigate how your data might have changed over time?	Do research of Hoveton and wroxham (eg. pictures/statistics) and see how it has changed and developed.
Any related information you need to research before you go on the field trip?	Research old pictures of Hoveton to see how it is changed.
Ideas of how to represent you data	photo montages, powerpoint with hyperlinks to different slides showing different places in Hoveton and sketches.

Figure 5. Group 6's planning sheet.

Figure 5 suggested Group 6 are taking ownership of their work. Like Group 4, Group 6 have identified health and safety issues which are relevant to their fieldwork location of being near water. They appear to be compatible as they relate to the unique raison d'être of the place. When subsequently asked about their presentation, the students made it quite clear that within the group unit they had followed their own pursuits. This group was unusual in aiming to use their haptic sense. Here the students intended to follow cultural geography's growing recognition of the whole body, although Crang (2003) acknowledged this was an area awaiting further development: "[H]owever, there is rather less on the actual processes of learning through our bodies' responses and situations – that is haptic knowledges" (Crang, 2003, p.499). Their progress in this area will be monitored in the next section where the students use their senses to collect place information. Potentially members of Group 6 intended to use their haptic sense along with their senses of sight and sound to find out about their place of study.

The third planning sheet was from Group 7, who did not appear to have fully engaged with the need to plan out the minutiae of their place investigation. This is understandable as it required a step into the unknown and an ability to think through an activity that they may not be able to conceptualise at this stage, until they engage with the reality of being in the place.

Aim of your investigation	to find out if tourism in Wrotham is sustainable
How do you plan to carry out your investigation?	use quadrat to measure amount of litter in different parts of the brook.
Where do you plan to collect your information? (locate on map)	
What data will you be collecting?	environmental quality
Equipment required	A clipboard A quadrat 1m
Health and safety issues you need to be aware of	don't pick up litter don't fall in water
Ethical issues you need to be aware of when collecting information	
How could you investigate how your data might have changed over time?	
Any related information you need to research before you go on the field trip?	
Ideas of how to represent you data	graph

Figure 6. Group 7's planning sheet

In figure 6 Group 7 identified an activity, a litter survey and the related equipment they would need to carry out their investigation. Their answers were minimal and there appeared to be little engagement with the activity. This suggests further differentiation was required with the possible addition of a step by step consultation sheet, guiding questions or even possible exemplar sheets were required.

The following reflective vignette provides observed contextual insights of the students filling in their planning sheet.

When observing the class completing their fieldwork planning sheet, I particularly noted Group 4 did so in a stealthily, nearly covert manner. They were clearly immersed in writing down in minute detail what and how they were going to carry out their data collection. When I approached the group, they were huddled over the form. I asked about what they were going to do, and I was quickly told they had in all under control. When I asked if they had thought about how they were going to ensure their camera was still, I was informed they had a tripod. I felt as if I had intruded and they had the whole matter in hand.

In contrast the two students in Group 7, did not appear to have engaged with the activity and were more engrossed in their conversation. I asked if they had any idea about their group activity and they said they would do a litter survey, using quadrats. I had the impression that was the end of the matter, they had everything sorted out. However I did not feel they had actively engaged with the place or what they were going to study. They were being asked to plan out an activity that they could not fully envisage. I was left feeling they needed more stimulus to engage them with the activity. They were quite happy to continue with their conversation which I had interrupted.

The girls in Group 6 appeared interested and enthusiastically entered into the planning of what they were going to do and how they were going to represent their findings. When I questioned them about their activities, I had the impression that they were quite self-sufficient and keen to be able to integrate photography and artwork into their study.

All three groups appeared to be quite at ease with one another and seemed quite content to be working with one another.

(Researcher reflections)

This planning stage was arguably a necessary stepping stone towards introducing students to exploring place, especially in starting to engage with its multiple elements including the nonhuman. It prepared the students to study the place through a Somervillian approach in having a sensory embodied place experience to collect data to tell their place story.

5.3 Sensory embodied engagement

This section will look at how the student used their senses to explore the place and I argued that using their senses gave the students a different experience than a traditional approach and appeared to increase their perception of being in place. When questioned about the use of their senses the students believed they had helped them to connect with

the place. The following comments demonstrated how they felt this to be the case through two groups' discussions.

Researcher: Good morning. I am talking to Group 8, PO, PP and PQ about their posters, work and geography fieldwork at Wroxham, Hoveton and the Broads. Now looking at your posters, try to remember what it was like. It was a few weeks ago now. Which senses have you used in studying Wroxham, Hoveton and the Broads?

PO: We used sound because of the animals, the Broads and nature and stuff like that.

PP: We use sight to see what was different, nature and things, water and boats and things and tourism.

Researcher: PQ anything?

PQ: Smell.

Researcher: Oh, what smells do you remember particularly?

PQ: Water.

Researcher: Did it smell? In what way did it smell?

PQ: It just cos I don't really know.

Researcher: Thank you. Do you remember it smelling differently in different places?

PQ: Well no but the Broads smells differently to like the roads and stuff.

In this discourse the students instantly recalled how they had used their different senses. Interestingly the first two students related their senses to nature. They contextualised the use of their senses to iconic features of the Broads. Their comments suggest their senses were used to negotiate their place understanding and helped to contextualise different features.

Group 7 continued this discourse in their interview.

Researcher: Now just going back to the fieldwork day, do you feel using your senses has helped you to gain an understanding of the places you have visited?

PA: Definitely, I would definitely agree because if you were going somewhere and you didn't look into the place you could easily walk by it even though it is completely beautiful you could easily miss these small little things that make a place it is.

PB: Um.

PA: The noise you hear you don't just hear cars whizzing by on a motorway.

PB: Um.

PA: If you listen a little bit close you hear ducks and swans and you can hear playing and all these wonderful sounds you wouldn't hear if you didn't **listen**

(intonation in the student's voice). You can be really ignorant and just listen in and you can smell the air you know. You can get a real good feeling about the place. You can understand it more.

During this animated narrative PA exemplified how using his senses enabled him to engage with the surrounding environment in a more meaningful way. This is the third group who in Figure 6 had shown limited enthusiasm for planning their group activity, prior to the fieldwork. Once he had experienced the place, PA could explain how using his senses supported his place understanding. The intonation given to 'sound' gave the impression that the student felt it was particularly important as a means of finding out about his surroundings. In addition, PA noted that using his senses helped to train his field of vision and hearing and during the process had created a deeper place engagement. This was evident from the way in which PA was adamant about how the insightful place information had become evident from listening to his surroundings. The way in which the student linked his senses to the feeling of a place, suggested a perceived relationship between the senses and the aesthetics for a place. As the narrative developed PA managed to use his senses for cerebral insights into the nature of the place and as a means of developing his affective domain.

The members of Group 6 particularly mentioned their haptic sense. The students answered questions about their senses while the computer seemed to shut down while showing their power point presentation.

Researcher: "Well, while we are waiting for it to get up, could you tell me what senses you used in this particular study because I think yours embraces more senses than some students so if you could please _"

PD: "Um, well we used a lot of sight because we took a lot of pictures and that sort of creates, is you have got lots of pictures, it can create an image in your head of what it's like and we also used sound to add the feeling of Wroxham and Hoveton and what else did we use?"

PE: "Kind of touch as well, cos I took pictures of different surfaces in the different areas and you could, when you are there you could touch them and feel what it was like in the different places we went so."

Researcher: "This one is particularly interesting. The one you have got here of the wall is it PD? Where did you get those textures from? Is it a wall or what is it?"

PD: "Yeah, it is one of the walls of a pub I think in Wroxham, so you didn't get that in the park or on the boat ride, so it shows how the town centre is very different to the rest of Wroxham."

These students added insightful information that strengthened the argument that using their senses allowed them to engage more deeply with the place. Firstly, PD demonstrated how her senses supported her ability to internalise her place knowledge and increased her conceptual understanding. While PE started to add a different dimension to her place understanding through using her haptic sense. The information from these assertions suggested the students were able to differentiate between places according to their textural surfaces and in the process produced a mental image of the spatial haptic characteristics.

The students in Group 6 have extended understanding about the use of the body in geography fieldwork and demonstrated how for them it was a facilitating instrument in their place research. The approach has supported them to spatially differentiate areas according to their textural surfaces. For example, they could compare and contrast different locations. Furthermore, their senses appeared to enable these students to internalise their conceptual understanding of place, especially the unique features of this place. In so doing these students have contributed to how learning can take place through their whole body's reactions to different locations, whether through their sense of smell, sound, vision or haptic understanding.

The students in Group 6 through their interview comments appeared to support assertions of the body's potential to provide deeper place connections. This supports the emphasis Somerville (2010) gives to place learning through the body as a vehicle to connect a person with the environment. At the same time, they are adding to how the body can support geographical research in the study of a place by demonstrating how the body can be an agent of research. In so doing, they appeared to be able to use their senses to generate information about their place of study. It could be argued that their sensory bodies have acted as an epistemological means for furthering their place understanding. It suggests this knowledge has been reinforced through the students collecting it for themselves, firstly through their recognition of differences within the place and secondly in their selection of features that they felt were particularly worthy of recording. This indicates value judgements were being made in the creation of their place messages.

The idea of using their senses as a route to further their place knowledge was taken a step further by PU in Group 1:

Researcher: Which ones particularly?

PU: Well sight, you could actually see what you were looking at uh, the boats and wildlife and the sort of natural side of it like the forestry bits. Um probably hearing as well was quite important because you could hear the birds in the trees that you can't see and the sounds they make and um also when we were interviewing people you could hear what they thought about the place.

The information given in this narrative painted a picture of the diversity of benefits from using their senses. However, PU directly linked and recognised the use of his senses as a means for generating fresh place knowledge. PU was part of a group who discovered insightful place knowledge from talking to a local shopkeeper.

The reference the students made to how they used their senses demonstrated their importance in supporting their developing place understanding. Therefore, I argue the importance of fieldwork to support the implementation of Somerville's place pedagogy. This is endorsed by Somerville (2013a) who makes being in place fundamental to her place pedagogy. "[P]lace is known through the senses, the body, and the subtle pedagogies of layered storying which every place contains" (Somerville, 2013a, p.19).

The last student's comment about listening to people's place knowledge appeared to confirm the idea that the students were using their being in place to amass information. The students' understanding and knowledge about their study location appeared to grow from listening to local experts, the tour boat guide and the local wildlife warden.

The students experienced a different embodied sensory experience listening to experts in the cabin of a moving boat, where they could look outside the window to reflect on what they were being told. Real live exemplification was at hand for the tour guide to draw upon, consequently this in situ experience should not be overlooked. The following diagram in Image 7 demonstrates how it could appeal to the students' visual sense.



Image 7. Flip chart with prepared visual aid

The rich bird life was brought to the students' attention as soon as they entered the boat as mentioned in the following vignette. This experience helped to increase the students sensory awareness of their surroundings.

Stepping onto the boat felt like entering a learning environment. There was a flipchart on their right with pre-prepared coloured diagrams. Every available wall space was covered with a coloured picture of a large named local bird. This was a sensory experience. When the boat moved through the water, there were further sensory experiences of seeing, and hearing a living landscape.

The students were greeted by two people on board, the tour guide and the navigator. Both appeared experts from the way they spoke about the local environment.

Meanwhile I was surprised that Group 7 sat at the back of the boat when in the classroom they normally sat at the front. At the same time, it did not detract from their focus on the talk. PA was an active participant in making valuable contributions to questions. (Researcher reflections)

After reflecting on the whole fieldwork experience the students particularly valued the information which they gathered for themselves.

Researcher: Has your study of these places, of the places you have been to influenced how you view the environment, or do you look or think you might look at it in a different way from these experiences you have had?

PD: Yeah, I think from taking the sounds from the different places it was, I was standing there and I was taking it and I was listening to it and I was listening to it in more depth and really understanding the place more, yeah, that has influenced how I have seen like the environment."

Here the student particularly valued using her sense of hearing which had enabled her to connect with her surroundings. The act of recording the sounds required the student to stand still and identify their source. In the process the student had related to the environment in a different way. PD reinforced the importance of sound for her and appreciated its significance as a means of connecting with nature. This was supported through the need to patiently stand quietly during the recording process. There are parallels with Somerville's (1999) listening to sounds in the desert. The following section extends this understanding of the students' use of their senses by linking them with their sense of movement.

5.4 Walking and exploring

In this section there is an exploration of how the students used their freedom to get to know a place through walking in their groups. I argue that having a level of self-autonomy allowed the students to engage with the place in a different way. The significance of walking as a means of getting to know a place was endorsed by Massey et al. (2009) through her holidays in the Lake District. The concept of walking trails outlined in chapter 4 demonstrated their long tradition for passing on traditional knowledge through stories at key sites. In this scenario the students identified for themselves key sites, which they wished to record and gather information to add into their place story.

A key difference between the morning and the afternoon activities was the opportunity for the students to choose for themselves where they went; it gave them a chance to become explorers. The activity was introduced by the students coming together as a group and sitting down on a raised step of the boardwalk near the water, to sit quietly, and listen to what they could hear. It was a hot day, so it gave them a chance to get a feel for the place. However, sitting still for long was not a favoured activity for teenagers in this group and they were keen to be off on their place explorations. The students did not stay in any one location for long at a time and spent the afternoon moving around and exploring the place. The following vignette sheds light on their first explorative steps.

I was initially bewildered to observe the students apparently appearing to wander aimlessly around and seem disorientated. It was a bit disconcerting as to whether they would ever settle to the investigation. However, I need not have despaired as they were finding their bearings. For some students it was their first visit to the place and they were engaging with new territory. In hindsight it could be likened to a settling in process. This initial investigation appeared to help them to decide where they wanted to explore in more detail.

(Researcher reflections)

These observations support Job's (1999) recommendation that students be given time to settle into their fieldwork destination. This activity was recognised by Widdowson (2017) who felt there were differing views about the need for allowing students time to adjust to their new destination:

There is some conflicting evidence that bringing students into an unfamiliar setting can be a barrier to learning, unless they are given time to adjust to the new situation. This goes against the natural inclination of most field trip organisers, who like to keep students busy to make maximum use of limited time outside the classroom (Widdowson, 2017, p.230).

The evidence from this fieldwork appeared to support the argument that students do need time to acclimatise to their new environment. Some students in the group had not been to the place before; or if they had, they ended up discovering parts that they had not seen before. These students were being asked to become independent active explorers in finding and recognising features in the place to tell their own place story, so time to 'adjust' to their new surroundings was required. Obviously, there was a need for the students to act responsibly to fulfil the school's health and safety guidelines. This orientation time helped to ease the students into this place exploration.

After their initial exploration the students spent time in their chosen location where they wanted to record information. Most groups from my observations spent time with the nonhuman natural environment. There was a fascination with the ducks, swans and birdlife. This was evident in the following photographic examples where students were drawn to the natural non-human aspects of the place.



Image 8. Students connecting with the natural environment

The students in this image were sitting quietly to connect with the wildlife. In both Images 8 and 9, the students crouched down to be at a similar height as the subjects of their observation. These students were drawn to explore the natural environment rather than the shops and main street. The area was aesthetically attractive and surrounded by dense green vegetation. It was a quiet part of the town.



Image 9. Student focusing on a pair of ducks

The student from her bodily position in Image 9, appeared to be crouched down to improve the quality of her photograph of the ducks. She had managed to get close to the ducks without apparently disturbing them. This suggests she had connected with the natural aspects of her place of study.

There was no clear observation point from which the students could overview the whole place, which meant they needed to become explorers and discover the place for themselves with the help of their basic map. This gave the activity an added sense of

mystery in wondering what they would find around the next corner. The students in Image 10 used this opportunity to explore by themselves which took them to the

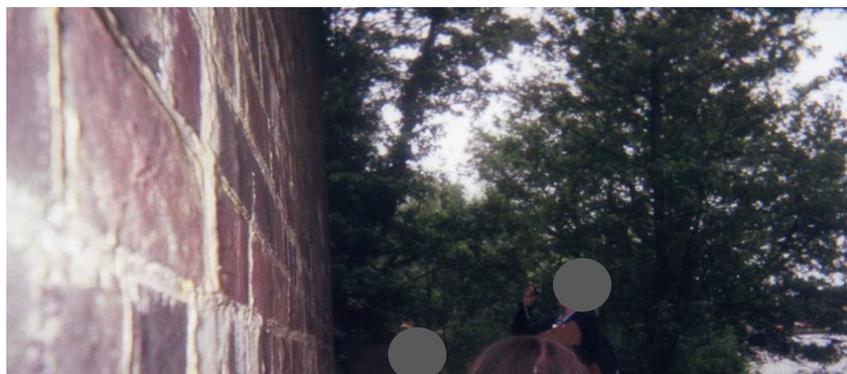


Image 10. Group exploring a peripheral location

perimeters of the zone available for their exploration. The following comment was made by PS as part of a discussion with his fellow group members about their reflections on taking part in the research:

PS: Yeah and I saw bits of Wroxham that I haven't seen before, so it was like an adventure really.

This comment confirmed PS appreciated being given more autonomy and responsibility to explore the place for himself with his group. The need to explore a place within the timespan of an afternoon, meant the students could not stay in one location for long. However, they quickly seemed to get their bearings and find their way around. The path between the car park and the railway station was a popular venue as it was on the outer limits of the students' permitted area. The following image 11 of the robin



Image 11 Connecting with the wildlife

demonstrated the amount of concentration by the student to take this photograph of a robin. The scene suggested the student had connected with the subject. The quality of the photographs was very good considering they were taken with a disposable camera. The popularity of the nonhuman suggested this area of research has appeal, even though Somerville et al. (2015) remarked that it is unusual to see it in the primary school because of the demands of the existing curriculum. However, the interest the students have shown here in the nonhuman suggests it could be a way of connecting young people to the natural environment and engendering a sense of care. An exploration of this avenue is beyond the remit of this current research.

In their exploration the students started to differentiate places according to their sounds and textures. For example, Group 6 took two contrasting sounds recordings one of the town centre with the noise of traffic and the other of birdsong, which they listened to in the trees on the edge of the park.

I observed several groups setting off along the pathway to the railway station which was outside their designated area of exploration. When I caught up with them, they said they wanted to make recordings of birds in the surrounding trees. It was a privilege to watch their level of concentration. The members of Group 6 listened intently and it was a pleasure to watch the mesmerised expression on PE's face while making the recordings.

(Researcher reflections)

The idea of having a restricted area of the place to explore was a bone of contention with the students, one that PA brought up in his interview. This could possibly be re-assessed in the light of adopting an exploratory approach rather than standing at designated areas counting traffic. For some, the natural environment offered more space for freedom of movement and the opportunity to get close to wildlife, while others preferred exploring the more built-up area around the shops, especially the Roys emporium. This was expressed by PC:

Researcher: Now do you feel your understanding of place or any place in particular if you visited other places has changed from taking part in this research?

PC: " definitely feel like I have looked at it differently because um you look at it in more detail when you are trying to find out information so and you want to

look for things interesting that and in the theme of like what it actually shows of what the place is, so when you look at it in that kind of perspective you see more than just walking around on your own not really, like you're there but you don't really see it as much as you do when you are actually looking at it.

Here PC was motivated and fully engaged in the activity in wanting to search out interesting features to record. The student believed that using her sense of sight had provided a means of connecting with the place. PC rose to the challenge of being given autonomy by identifying unusual aspects of the place. The narrative suggested PC had developed the ability to look to see. Interestingly there were seven references in PC's narrative to her sense of sight, which confirms the importance afforded to our visual sense. The significance of sight in western culture is confirmed by Rose (2016) who recognised we are continually immersed in 'visual technology' whether it be in digital cameras, images, newspapers, posters, films and mobile phones. Rose (2016) indicated the growing importance of our visual sense is indicative of the west's move to a postmodern society. At the same time Rose (2016) referred to the west's conflation of seeing an object with knowledge. This is worrying when the eye can be deceived by technical manipulation. This was mentioned by PN's in his recognition of the ability to digitally enhance an image to create a different sense of place.

As part of a discussion with her fellow group members about their response to taking part in the research during their interview, PC made the following comments:

PC: I think walking around in our groups and not as a whole group is quite good because you can sort of do things at your own pace and so you see things differently and you have more time to think about like the pictures and the sounds and you can just take it in more kind of being in a group than like in with a load of people.

Here the student valued having time to think, reflect and move around the place at her own pace. This suggests the student enjoyed the autonomy of being able to decide where and what she would engage with and for how long. PC was part of a group that took sound recordings that required patience to be still and listen to what was happening around them. Such an activity could not easily be carried out if the students were investigating the place as a large unit. At the same time the comments suggested the group worked well and were supportive of one another and they appeared to have shared interests. Being part of a group was valued by the students who appreciated the

companionship of being able to explore with others or to spend the day with their friends. This was extended by PH who felt it enabled him to get to know his fellow group members, whom he did not know very well before the fieldwork. Consequently, there were social benefits from being part of a group. At the same time it required them to decide where they were going amongst themselves and make joint decisions, which was a training in negotiation. Having a harmonious working atmosphere appeared to be a contributory factor to the level of student engagement with the activity.

In Image 12 the students were companionably walking over a tarmacked covered pathway looking over towards the tourist related features. Having a buddy to walk with was a significant part of the weekly ritual for the students in one school on their journey to the creek in the *Love Your Lagoons* project (Somerville et al., 2015). In this research the students were observed walking and companionably talking while appearing to observe features in their fieldwork location.



Image 12. Students walking and exploring their place of study.

Walking gave the students autonomy and allowed them to explore the place and acted as a pedagogic means of enabling the students to find out information about the place. In this process it was linked with the students' other senses, for example looking and listening. In addition, walking gave the students a chance to engage with a variety of different environments over the space of the afternoon. In this section the students have

demonstrated how using their senses has supported their growing conceptual understanding of the place.

5.5 Using cameras as a means of recording place experiences

The students were given disposable cameras as a pedagogic means to encourage them to stop and engage with their surroundings. Taking the photographs required the students to visually scan their surroundings and select features they felt were worthy of recording. Consequently, I argue having cameras focused the students' visual attention on their surroundings and required them to connect and select features they felt were representative of the place. The lens they applied to the landscape became more critical with their increasing place knowledge, gleaned from their morning talks from the tour boat guide and wildlife warden. This is reflective of Somerville's (1999) interpretation of the genre to connect with a place. Somerville (1999) recognised the ability of photographs to act as a cultural record to collect information to contextualise her place stories. They hold meanings and can act as artefacts to return to in the search for messages they hold (Somerville, 1999). Consequently, photography can provide a means of amassing visual data for developing place stories.

The experience was multisensory and was integral with their walking and exploring the place, as demonstrated in the previous section. The use of cameras could be construed as a means of strengthening Rawling's (2011) argument for allowing students to experience place in a way that would increase their awareness of a place. This section will analyse whether giving students' cameras enabled the students to collect material to re-tell their place stories. It will be carried out through interview transcripts, photographic evidence and vignettes. The representation of the findings in chapter 7 examines what they chose to engage with.

The first reflection comes from the Class Teacher who could reflect upon how he felt his students had made use of a potential resource.

Researcher: Um to what extent giving pupils a disposable camera helped them to connect with their surroundings?

Class Teacher: I think it was a nice idea. Again, it allowed freedom. Students would be rarely given something like that just to do what they wanted with it er I think it enabled them to well, it gave them freedom to explore or to take photos a bit more at ease with the investigation. Er um at the same

time I think the disposable camera would have required students to sort of look more closely at the area and think what they are taking photos of, so I think it would have trained their eye a bit more er um especially as some students wouldn't naturally want to take photos. Those students (_ _) really have been taken out of their comfort zone slightly by being asked to take photos and it would be, it was kind of interesting to see how those particular students interpreted their surroundings and what they decided to take photos of which we saw when they presented the A3 sheet and er there was a wide variety of images with some students focusing on particular things which gave an insight into what they noticed so I think it was nice, probably nice for the student, enjoyable and at the same time as a teacher you can really see where individual students train their own eyes and what they look for.

The class teacher on reflection felt the cameras, were a novel idea and believed they provided a means of actively connecting the students' field of vision with an object in the environment that captured their attention. The message that came from this narrative was that the cameras trained the students' eye and during the process taught them to be observant and discerning in what they chose to record.

The disposable cameras were a simple means of engaging the pupils with their surroundings. The following message from PU in Group 1 is one student's view of being given one.

Researcher: Yes, that's a good suggestion. Now you have got in front of you different insights into the environment and wildlife. PU in yours why did you take those pictures that are different from your neighbours? Why did you hone in on those in particular?

PU: I think with a disposable camera you have to take important pictures because um so I took some pictures because um so I took some pictures you see it was plants and nature and when you see activity as well and I took some things where like where it was natural but it was so it helped like at certain times and I took the red one here with the swan because I didn't know it was going to be red but I took it because it was an animal which a bird which I hadn't seen before and the way it came out I felt it showed like anger. There was litter around where it was gathering swans.

In this narrative the student appeared to value being given a disposable camera to the extent that he felt he should take care how he used it. This extended to giving careful consideration to what he chose to take photos of and this was evident from his decision

to only take “important pictures”. Interestingly he conflated important with taking photographs of nature, which he clearly deemed to be noteworthy of recording. At the same time within the theme of nature he wanted to record a bird that caught his attention, a swan, and the indignity of it facing the issue of having its habitat threatened by litter. Here PU is using photography to collect visual evidence to tell this place story.

In this research, the camera did as Somerville (1999) remarked it could and enabled the student to ‘construct’ his own interpretation of aspects of the place that he felt were noteworthy. Evidently PU had decided to record a natural issue, and this was the message that he wished to share about the place. Photography was used by Somerville (1999) in her place storytelling, along with maps, drawings, poetry in her culturally influenced presentations. The key purpose of Somerville’s (2010) stories was as a forum for meaning making. With this aim in mind the photographs will be examined to find how they could contribute to developing place meaning. In this instance photography has provided a means of connecting PU with his object of vision, in a similar way as envisaged by Somerville: “[T]he meaning of this popular form makes it an eminently suitable form and genre to represent a performance of alternative spatial practices in the landscape. And, rather than distancing, it seems to be more concerned with establishing a connection between photographer and photographed, subject and object, seer and seen” (Somerville, 1999, p.29).

In this instance PU’s photograph, has connected him with the object of his vision, the swan. There are links to be made between how PU used his photograph of the swan surrounded by red, possibly caused by over-exposure, to tell the story of the litter threatening the swan’s habitat and Somerville’s (2013a) storylines. The layers or different interpretations of the place that start to emerge from the students’ collections of photographs are reminiscent of Somerville’s (2013a) work with Aboriginal and Torres Strait Islander communities where stories can be re-told with varying levels of intricacy depending on the audience. Consequently, Elders would hold different levels of knowledge to children and the uninitiated (Somerville, 2013a). Traditionally these stories would be passed on through ritual and ceremonies based in Country (Somerville, 2013). This does suggest there is potential for future research into how students’ place findings could be transmitted to an audience. In the instance of PU’s photographs they would be used to create a multimodal poster creating a sense of place. PU’s poster has a natural

theme while highlighting environmental issues that have emerged from nature/culture interaction. The visual evidence was selected because of the critical way in which PU had engaged with the place while walking around. PU's place story using his photographs of negative environmental issues, does have a strong message.

When using their cameras, the students visually scanned the landscape to select features that they felt were noteworthy. This echoed Somerville's (1999) recognition of the use of photography to create an individual message. In Image 13 the student was attracted to the unusual, in this instance, one that signified a sense of taste through the symbolic use of a cone to advertise its goods. A photograph of the boat selling ice cream would provide the student with the means to tell a different story about tourism, one that possibly has links to the local economy. In so doing, the genre, as Somerville (1999) suggested is a means of telling a different place story. This image could be interpreted



Image 13. Student visually recording an unusual feature

as a colour photograph, which in this instance provided photo-documentary evidence of a unique place. At the same time the photograph provided a feel for the place (Rose, 2016).

In addition, Rose (2016) suggested photographs can provide insights as is the case here, of the rich sensory appearance of the landscape and its features.



Image 14. Students engaging with nature

In Image 14 the students appeared to be using photography to connect with natural features and to gather information to include a natural focus for their ensuing place story. Here the students have demonstrated how photography is not a neutral medium and reflected the students' apparent interest in wildlife. The photographer on the right is crouched down in response to his surrounding environment and appeared to be as still as possible to take a photograph of local birdlife. Both students used their sense of sight to critically interpret and engage with the natural environment. Photography is used here to connect the students with their object of study which reflects one of Somerville's (1999) potential uses of the genre.



Image 15. Photograph of river speed limit

According to Rose (2016) it is usual for researchers to use photographs as a record of what they saw, but in this research the students have used photographs as artefacts to add into a later place story. In Image 15, the student has interpreted and used a speed symbol to tell their own place story in chapter 7. The initial connection came from the talk by the tour guide who shared the geographical information with the students about the negative impact of speeding boats on local ecology.

This section has demonstrated how using cameras supported the overall pedagogy guiding this research and enabled the students to use their sensory embodied presence to collect visual data to provide artefacts to tell their own place stories when they returned to the classroom. The students were drawn to collecting evidence of contentious issues, like PU with his litter. Other evidence related to the developing story about the need to reduce the impact of speeding boats. In the process these students continued to use geography's acknowledged use of photographs (Driver, 2003, Rose, 2003, 2008) and extended it by demonstrating how they can be used as a means of enquiry (Driver, 2003). The students appeared to have used their cameras to interpret the place learning environment and actively discern which features they wished to record for their developing place stories.

When members of Group 8 were asked about their perceived use of having a disposable camera they provided an original view:

Researcher: Thank you. Do you feel having a disposable camera helped you to engage with Wroxham, Hoveton and the Broads?

PO: It helped us to take photos of different aspects of tourism and different negative and positive points and it helped us to find a point, like a focal point that was good or bad about tourism.

Here the student thought having a camera helped her to search and find notable features in the place to support her developing views about tourism. In identifying the negative and positive aspects of tourism, it apparently supported PO to develop a discerning eye in evaluating her view of the place. This line of thought was further developed by fellow group member PP.

Researcher: Do you think you would have um looked at those particular features without having a camera or not really or?

PP: Um, I think I would have looked at them differently as you just look at things or walk off. With the picture you can capture the good and bad things about it.

In this statement the camera appeared to have connected the student with her fieldwork place of study. In this scenario the camera could be construed as the pedagogic means to select visual artefacts to develop geographical thinking through building subject knowledge. Both students had started to develop their discerning geographical imaginations in recognising features that formed the subject's vocabulary and conceptual framework as part of the process of interpreting the landscape to take relevant photographs. This task appeared to support these students to become independent geographers in making this link. They were using their fieldwork experience of being outside to develop their discerning geographical gaze. The students pointed to how the cameras had given them agency to support their group strategy to collect and record the positive and negative impacts of tourism. During the process the students appeared to have applied Gruenewald's (2003a) discerning lens to identify negative forces at work (deconstruction) and counteract them with positive processes (reinhabitation). Having cameras supported these students to develop this dialogic relationship with their study location and develop their meta level thinking, while they were developing as independent geographers.

Rose (2003) considered geographers held a distinct position within social sciences through the way in which they used photographs to build knowledge. The students here have continued this tradition through their recognition, selection and construction of photographic place artefacts. The key point that Rose (2003) made was that the photographs themselves were not a product but a means to communicate a point. The students highlighted that their participation in this pedagogic process developed their conceptual understanding, including their geographical vocabulary and grammar (Lambert, 2011, 2017). All of this was facilitated through adopting Somerville's (2010) pedagogy of learning about place through the body, stories and in this western scenario identifying contentious issues. Consequently, I argue that for this research into an alternative place study in secondary geography, cameras do provide an important linchpin.

However, the use of digital images should be used with an element of scepticism as one student raised the question of whose story of place was being told with the use of digitally enhanced images. The following narrative demonstrated this aspect of photography:

Researcher: So what about the actual process of taking the photo? How did it help you or not as the case maybe?

PN: It helped because there was always a resource you could look back at and prove your point. Um so you can retouch it and put it all together to give an even deeper sense of place for Wroxham and Hoveton.

Here the student has explained the value of photographs as an aide-memoire and as a useful tool to substantiate an argument. The idea of digitally enhancing an image has demonstrated how photographs can be manipulated to portray the photographer's interpretation of their selected view to make their point. Using this evidence, PN's comments point to the need to view photographs with a discerning eye as they may not be neutral artefacts. This reflects Rose's (2000) argument that photographs are indeed complex objects which stems from the layers of decision making that have gone into their production, from the initial lens being applied to their selection, to how they are constructed and subsequently used.

Members of Group 6 in section 5.3 referred to how taking pictures had helped them to conceptualise their visual understanding of the place. During this process they had made the link between cognitive and affective learning in how they used their senses in building feelings about the place. All of this was facilitated through using cameras to support a whole bodily learning experience one that linked mind and body. The use of developing learning through an embodied place presence is recognised by Somerville (2010) as being the most fundamental part of her pedagogic approach: "[O]f the three elements of a place pedagogy, this is the most radical, transformative and challenging. After two major collaborative place projects with Aboriginal communities I became aware that the Aboriginal people I worked with were differently embodied in the landscapes of their stories" (Somerville, 2010, p.336-7).

It was after reflection and comparison with her own western view of the landscape that Somerville (2011) realised the significance of having an embodied place experience from

which to construct place knowledge. This awareness led her to question the weight given to feminist poststructural use of language (Somerville, 2010) as the main medium of communication. This research points to how the students in using cameras appear to be supported in developing a whole bodily response to the place. This reflects Somerville's (Somerville, 2010) questioning of binary thinking: "[I]n many strands of place research, the subject/object binary is regarded as the problematic basis of the separation between subject and object on which environmental exploitation is founded. I regard the mind/body binary as primary, and foundational to Western language and thought" (Somerville, 2010, p.337).

This research in adopting Somerville's (2010) approach has used cameras as a conduit, to join the mind and body to enable the students to have an embodied place experience, one that allowed them to develop cerebrally, while appreciating the aesthetics of their surroundings. In the process the students' cameras appeared to have supported the students in their growing geographical conceptual understanding of the place through developing a critical view. At the same time the cameras enabled the students to connect with their study location. The whole process allowed them to gather artefacts to use in constructing their developing place stories, illustrated with evidence of contentious happenings in their study location.

There is one last contribution to this discussion about the use of cameras which came from PG in Group 2 which broadens the discussion of how cameras were used to tell a spatially related geographical place story.

Researcher: All of your pictures are slightly different, which is brilliant, so why did you choose to take the pictures you did in yours PG? There is a really clear theme to them to yours PG, isn't there?

PG: Um, at first I was trying to get a more wild element so I could take pictures of what are normally there rather than what people had built around it but when we went into the town that was pretty much impossible so I took pictures more of the community and um areas that people go to a lot.

Here PG added a spatial dimension to her developing conceptual understanding of the place. In her narrative she explained how during the fieldwork she had to re-assess her strategy when she found the land use in the central area of the town incorporated more

community related features for the inhabitants. This required thoughtful reflection. Every step had required conscious decision making and the ability to think on her feet. During this process of active learning, the student had through careful consideration decided to tell a different place story, based on her growing emplaced knowledge. Here PG used the need to gather photographic evidence as the catalyst for developing her geographical comprehension. This is commensurate with Rose's (2008) recognition that photography has started to change from being a descriptive tool to becoming the means of developing geographical understanding.

The process of PG's active place learning can be linked into Massey's (1994, 2005) on-going concern about the process of representation reducing place to stasis. "But localities, as I see them, are not just about physical buildings, nor even about capital momentarily imprisoned; they are about the intersection of social activities and social relations and crucially, activities and relations which are necessarily, by definition, dynamic, changing" (Massey, 1994, p.136). In developing her evolving place story, PG, appeared to realise and negotiate her changing place conception to incorporate a social dimension that became apparent through her emplaced fieldwork experience which allowed her to see the full picture. This student displayed a dynamic understanding of place.

In response to Rose's (2008) comment that it is essential thought is given to how the photographs are used in a geographical study, the students here have shown how taking the photographs has supported them to become engaged place learners. While the process of taking the photographs enabled them to become observant of happenings in their surroundings and to connect them with the many facets of the place, especially in this instance, the nonhuman natural environment. Photography also gave the students artefacts to tell their own detailed place story which was contextualised with examples.

5.6 Summary

The students have been introduced to this alternative place pedagogy following Lusted's (1986) initial structure of teacher, students and in this instance place knowledge. This was facilitated through following Somerville's (2010) embodied sensory approach that pointed to them being able to experience the place in a different way, through their whole bodies. This pedagogic approach was further developed through building place

stories and recognised emerging contextual issues (Somerville, 2010). These have been introduced into this place research through the students working in groups which were found to be supportive social units to facilitate them in developing their place interests and understanding. The students were introduced to local knowledge through a boat tour with a talk from a tour boat guide and a nature walk with a wildlife warden.

The students' place understanding grew through planning their own group investigation. For some students, this meta level thinking would benefit before their fieldwork experience from further scaffolding while others thrived on being able to follow their interests. Once they experienced the place the pathway became clear. Cumulatively the whole experience of walking, exploring, recording and using cameras gave the students a different fieldwork experience from being required to collect statistical data from pre-determined sites. However, the students required time to adjust to their new surroundings, and in so doing contributed to understanding in this field (Job, 1999, Widdowson, 2017). The sensory place experience of being in the place added a dimension that that Rawling (2011) felt was absent from geographical education.

In allowing the students the autonomy to walk and explore they started to gather sensory evidence to tell their own place story. This included haptic knowledge and they started to spatially differentiate places according to their unique sensory characteristics. This process was supported by giving students cameras to connect with their surroundings as suggested by Somerville (1999). The object of their vision was often the natural environment and the local birdlife. The cameras trained their eye and the photographs in capturing the place detail (Rose, 2016) were part of building their place knowledge. Through adopting the pedagogic approach, guided by Somerville's principles the students engaged with the multifarious aspects of the place, including its dynamic nature (Massey, 2005a). In the process their conceptual understanding of in situ geographical vocabulary and grammar (Lambert, 2011, 2017) grew and they started to use this knowledge to construct their own dynamic place stories. The creation of these stories developed through this unique combination of adopting Somerville's whole sensory embodied approach, supported by fieldwork, while the study adds to Crang's (2003) knowledge about learning through the body. The following two chapters expand on how the students have represented their sensory data and concurrently developed their place knowledge.

Chapter 6

Analysis and Findings 2 - Representation

6.1 Introduction

Drawing from the work of Gunther Kress (2010, 2014) the focus of this chapter is on the means employed to create meaning. The process of representation is therefore fundamental in supporting students in developing a conceptual understanding of place. The analysis of the work related to place understanding is interpreted through using the geographical conceptual understanding of Doreen Massey (2005a, 2014). While the alternative place pedagogy is supported by the alternative sensory pedagogic approach of Margaret Somerville (2007a, 2007b, 2007c, 2007d, 2008a, 2008b, 2010, 2015). Our senses provide a means to experience concrete and abstract concepts, for example using sight to view aspects of a place or hearing to explore sounds. Consequently, the ways in which the students selected a representational mode appropriate to their fieldwork, would support them in integrating their experiences into a larger concept of place.

Somerville (2010) suggested our main form of meaning is through stories. Stories are broadly interpreted through Somerville's (2010) lens to include visual presentations including drawings, photographs, video, scientific reports and oral recordings. This is further extended by Somerville (2010) who acknowledged each discipline has its unique conceptions of stories. In geography's case this includes the use of maps. Here emphasis is being given to Somerville's (2010) need to support young people to tell their own interpretations of place stories to demonstrate their changing place relationships.

The significant pedagogic feature of this research to support meaning making was fieldwork to allow the students to provide in situ sensory experiences and working in groups, to support one another to develop their conceptual understanding. The aim of this chapter is to identify ways in which the students have represented stories from their place explorations. The work of Kress (2010) is used to inform the analysis of the way in which the students have used language alongside other modes to establish their place meanings. The immersion in the study of a place using their senses provided the students with a different way of experiencing the place and, as a result supported their developing understanding of the place. In having access to a place, the students were able to develop their conceptual understanding of the place with its unique configuration

of land uses. After reflection, an alternative sensory place experience required a search for a different means of representing the findings.

The students in this research constructed presentations with the data in a variety of formats including drawings, photographic images, audio recordings, power points and video which would be difficult to fully represent in words. This chapter outlines and reflects upon the ways in which the students have used a variety of modal means to communicate their research findings. This will include a reflection upon the students' choices for representing their experiences and developing understanding of place. Consequently, this chapter undertakes a critical examination of how the students used modal ensembles to represent their fieldwork and research findings about their place of study. Specifically, there will be an examination of a selection of the students' A3 place posters created upon returning from their fieldwork to initially represent their photographs and experiences.

As noted in chapter 4, multimodality is interpreted as the meaning emanating from a range of communications (Jewitt, 2014). It encompasses the meaning that extends beyond language and varies within and between different cultures (Jewitt, 2014). The relation to our senses (Jewitt, 2014) is another recommendation for the inclusion of multimodality in this study into the use of sensory exploration. This analysis will examine how the students have used different semiotic resources to create understanding and to share their interpretation with their audience. The examination of the students' work is sympathetic with Kress's (2010) view that meaning is created in social situations, in this instance the students' groups and their interactions with one another.

6.2 A3 place representations: a multimodal interpretation

A sensory place investigation required scope for the students to reflect upon their observations and creatively represent their findings. This required a different approach, one that would still work to meet the KS3 geography curriculum requirements. Consequently, on returning from the fieldwork the students used their photographs which acted as an aide-memoire to stimulate reflections about their day's fieldwork. From my experience as a classroom teacher, the space provided by a plain A3 sheet of paper would stimulate the students to creatively represent their findings. The plain paper encouraged the formation of what I now understand to be multimodal presentations, which enhanced the students' representations of a sense of place.

issues affecting Wroxham and the Broads. His terminology reflected that used by the tour boat guide on the cruise. The meaning of his text, at times, extends beyond the image it sits alongside. This pattern is continued with the text around the image in the top right corner: “waterside homes are supported by stilts and are designed to be light – use thatch|”

PN was part of Group 4. This group created a video about Wroxham with a single-storey thatched building as the opening image. PN’s representation of the place extends outside the static poster, pulling in meaning from the video as well. He has marked the end of his textual communication with a vertical line rather than the usual sentence frame of punctuation (Kress, 2010). However, in so doing he has recognised the need to frame the end of his textual narrative. The layout of the text in proximity to the image indicates the significance of the relationship (Kress, 2010). In this instance PN uses this intermodal layout to enhance his message.

The developing environmental story is continued by PN with the commentary around the image of the riverbanks in the bottom right corner: “wash off the boats can hit against the banks making mud fall off and making rivers” (here the text runs into the image above). This has a link with the speed limit sign of 4 miles per hour, replacing the swan’s head. The swan and its nest are at risk from the speeding boats which can cause river erosion. The connection between the two shows relational thinking. It suggests a lack of concern by humans for the nonhuman other. It is further enhanced by the goose, another local waterfowl, overseeing the whole scene which further questions the anthropocentric use of the waterscape.

The scene is reminiscent of Massey’s (2005a) description of the Lake District with the meeting of multiple processes, all proceeding at their own pace to contribute to the event of this place. Here PN has managed to convey a sense of the dynamic nature of the place in the narrative around the bottom right image: “wash off the boats can hit against the banks making mud fall off and making rivers shallower.” This narrative reflects the story of the Broads started by the tour guide who used it to explain the need for the constant management and dredging of the manmade river waterway. The poster has provided a multimodal means for PN to use Somerville’s (2010) broad conception of story to display his ecological concerns about the place. The images have combined to tell the dynamic story of the Broads with the tension existing between the needs of the tourist industry

and those of the local ecology, including the nonhuman. There is a clear social and environmental message about the need to act responsibly for the good of the all inhabitants. In his representation PN has managed to combine the nature / culture binary through his relational thinking.

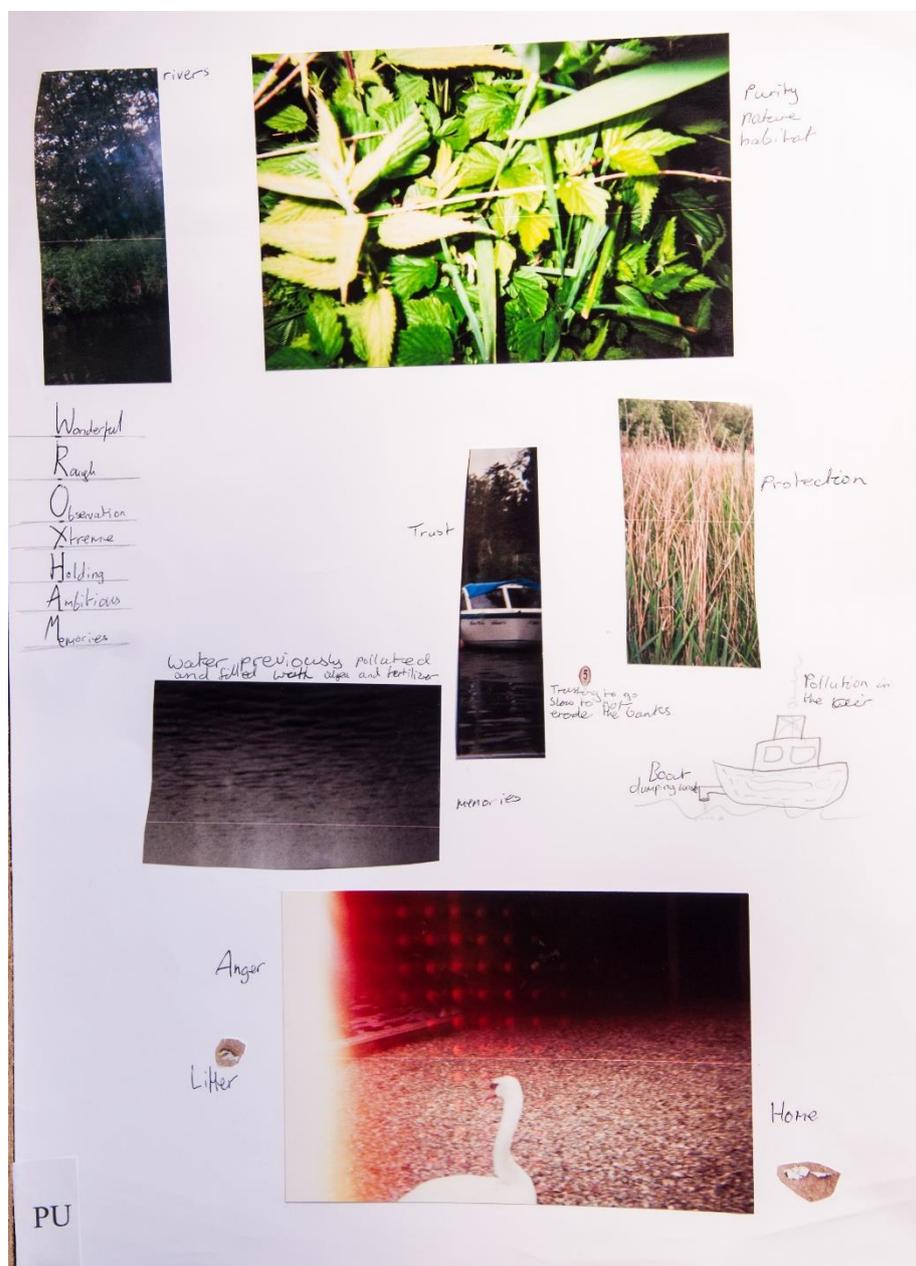


Image 17. PU's place representation

The overall impression of PU's place representation in Image 17 is of a student who has engaged with the natural ecology while being aware of tensions that exist between the human and nonhuman environment. Throughout PU has linked images to their textual interpretation through carefully chosen words whose meaning extends beyond the single word. There appears to be storylines starting with verdant green vegetation at the top of the page which is identified as being high quality through three descriptive words "purity,

nature, habitat". This is related to the central image, a motor cruising boat through the single word "trust" suggesting the onerous is on the boat user to act responsibly. This evocative word is explained through a cut-out 5 miles per hour sign, stressing its symbolic meaning. This is achieved through the following text placed directly underneath the sign: "[T]rusting to go slow to not erode the banks". The story of the possible negative actions of boat users is explained through a simple annotated diagram of a boat dumping waste directly into the water and emitting polluting fumes in the air. Here PU has used transduction, the transfer of meaning from one mode to another (Kress, 2010). In this instance from a sketch to words. This is a sophisticated communicative move. The inclusion of the word "trust" to the left of image of the boat, implied individuals should take responsibility for their actions. The student has demonstrated relational thinking in identifying the link between actions and water quality. In so doing he has combined the multimodal means of communication of text, image and design to ensure the audience shares his meaning.

Throughout the research PU displayed an interest in water quality which he followed up with a written account. The student linked this presentation to a time when water suffered from more issues with the single word "memories". PU used the word as a link to his statement about previous negative agricultural practices of fertiliser use contributing to the creation of eutrophication: "[W]ater previously polluted and filled with algae and fertilizer".

The statement is written above an image of polluted water appearing to block out sunlight. In this instance PU has used design with the combined use of multimodal communication with annotated sketches, photographs, and text in near proximity to enhance his message about acting responsibly. In addition, he identified remedial measures like planting sedge grasses to protect the river bank which is expressed through the adjacent word "protection".

Throughout his poster, PU has used colour to affect especially where he extended the unfolding story of threats to the Broads and to the nonhuman swan. PU enhanced the threat the swan was facing from litter near its habitat through giving the swan a red frame to convey "anger". This is compatible with the normative meaning of the colour red with its association with danger (van Leeuwen, 2014). Colour only exists in combination with other modes making it a multimodal form of communication (Kress et

al., 2002). Context is important when interpreting the meaning of a colour (van Leeuwen, 2014). In this instance colour is used by PU as a framing device (Bezemer and Kress, 2016) around the swan's habitat to demonstrate how it is being threatened by litter. At the same time colour is being used to affectively accentuate the message of outrage at the presence of the litter. The design of the presentation enhanced the threat through the close proximity of pieces of litter to the swan's habitat. The message is accentuated by the textual communication of a single evocative word "anger".

Throughout his identification of negative factors affecting the area, PU balanced these with ways of managing the situation. Positive ways forward were suggested through water users being trusted to act responsibly. In addition, steps are being taken to manage the natural environment by ensuring sedge is left along the river banks as a natural protection against river bank erosion. In this representation PU has conveyed his environmental messages through the careful choice of words and attention to layout to strengthen his intermodal messages.



Image 18. PQ's place representation

In PQ's place narrative in Image 18 the student has continued the use of colour, shape and design to affect. Colour is used to frame and link information. The use of colour in

this poster reiterates van Leeuwen's (2014) comment that colour's meaning is related to the context of its use and its association. In this instance green signifies information related to nature. The poster is divided into a series of themed presentations which are identified and separated by titles in large capital letters which match the frame of their related information. There appears to be a balance between the spread of 'informational load' between the use of images and text, although at a glance the main 'carrier of meaning' initially appears to be the images (Kress, 2010, P.60). The use of a colour coordinated title and boxes of text framed with a matching dashed line, guide the reader through the presentation.

In the presentation about boats, the same yellow used for the title, provided a border around the boat. The same technique of the repeated use of a themed colour is employed for the sections on animals, nature and rubbish. Each theme is further enhanced through the inclusion of a silhouetted shape of the feature. Within each shape there is an image of the relevant example. In the section on rubbish, there is a piece of litter encased in a cut-out shape of a litter bin. The message is adjacent to the image, in this instance directly above the bin. Colour is combined with shape and spatial framing to clarify the representation. Here presentation is understood to mean the original idea and representation is how it is represented through another means. In the following title the idea is shared through bold coloured font to enhance the related text. In Figure 19, PQ's narrative about rubbish extrapolated from her poster, PQ has expanded on how its presence poses a threat for the Broads and wildlife. In Figure 19 PQ remarked on the

RUBBISH

Around Wroxham and Hoveton there is quite a lot of littering, mainly around the shops. As many of the people in Wroxham and Hoveton are tourists staying there, it means that they are doing some of the littering. This is not helping the Broads as rubbish could go into the water and could harm the animals if they swallow it. To prevent this they could place more bins around as there were not many.

PQ

Figure 19. Narrative from poster about Rubbish

spatial distribution of the litter and noted there was a preponderance of litter near the shops. This comment suggests PQ is observant and has noticed litter's spatial relationship to where more people including tourists are found. In her textual commentary PQ has noted the relational impact of litter on the nonhuman environment of the Broads, who may swallow it. The use of framing in this presentation reiterates Kress et al., (1996) point about the dramatic nature of framing, especially when combined in a spatially delimited composition. Furthermore, it has reinforced Bezemer and Kress's (2016) message that framing can be used to enhance selected material for inclusion in the message, in this instance about litter. The central silhouette of an aquatic bird contains an image of a swan whose white colour ensures the nonhuman presence is well represented.

In the visual presentations on the right-hand side of her place representation, PQ has cut out sections from her photographs to create a montage. In these presentations she compared and contrasted the natural aspect of the Broads landscape with the managed natural landscapes of Wroxham. Here PQ has used the montages of shapes to convey the difference in the two landscapes. The straight lines of the boardwalk are contrasted with the wide-open space of the broad. The contrast is continued through comparing a managed parkland with a reedbed along a river bank with woodland in the distance. The viewer is drawn into the image through reading the interpreted messages about the different landscapes. Both images are presented in a regular rectangular shape with the surrounding white space acting as a frame.

Throughout her presentation PQ has used framing to separate and group information to reinforce her unfolding multimodal story about the place. The framing extends to her text which is presented in sentences which are separated by a full stop. Their meaning is developed in a western cultural context and unfolds through being read from left to right (Kress, 2010). Affective messages engendering feelings about the aesthetics of the place have been communicated through colour and design rather than words. The design of the poster has strengthened PQ's multiple place stories which are representative of Massey's (2005a) interpretation of place, especially with their human and nonhuman messages.

Three further posters will be briefly examined for the different ways in which the students have engaged with design to share their understanding about the place. Here

PC's poster has been chosen because of her decision to pursue her interest in photography to tell a visual story of the place. Throughout the presentation PC has introduced her interpretation of the place through colour to highlight and contrast different locations and characteristics of the place. At the same time PC has demonstrated Kress's (2010) interpretation of design as the communicated message of the designer. This is evident in her use of saturated colours to highlight significant iconic features of the place. The chosen features include the red, blue and white of the Broads Tours boats. At the same time in photographing Roys, PC has concentrated on its use of red and used colour to affect (van Leeuwen, 2014). It confirms van Leeuwen's (2014) findings that colour is associated with objects. In these instances, colour takes on the symbolic associations with the local retail and tourist providers, demonstrating their high profile in the local economy.

The central image is of a panoramic shot of the vast open expanse of the Broads. In her interview PC explained the conscious decision making that went into taking the image. The discussion below follows on from her fellow group members explanation of their choice of images:

Researcher: "Now PC could you tell me yours, which is different than the others."

PC: Well I kind of started to think of mine in a more photogenic way because, um, I chose the pictures with like the most colour that I chose like the sign. For example, showing, acting like a title to the whole thing and then that being like a panorama, because panoramas are sort of, I find they are better than pictures because it's like a whole view from the boat so you feel like you are there and they also contrast a lot, like these two pictures contrast."

Interestingly this student chose to focus on conveying her messages about the place through photography, in which she had expressed an interest. Here PC's narrative expressed her original intention to collect representative place images during her fieldwork to enable her to produce a visual place story. This extended to the use of the village sign as the title. In the layout the sign was given a central position at the top of the page, suggesting she expected it to be 'read' in a similar way as a textual communication.



Image 20. PC's place representation

The panoramic image in Image 20 does as PC suggests contextualises the study and provides a vicarious experience of being in the place. Thought has gone into the composition of the presentation, especially with the complementary images of the waterfowl either side of the central image. These recognise the nonhuman presence. There is an idea of going on a journey of discovery with the empty bridge over the water and people around the town. The student has captured and visually recorded a sense of movement through the presence of moving vehicles, people walking and a tour boat. The representation demonstrates the student's use of colour, design and selected images to capture a sense of place.

When contributing to a discussion about her experience in taking part in the research and continuing the discussion from a fellow group members' comments about the significance of taking sound recordings PC remarked about the accumulative effect of all the different learning activities.

PC: "I think taking pictures and putting them kind of in a collage like this, um, kinda helps you to notice how different the two places are, like the town and the nature because when you are walking you see like the change in between and it doesn't seem so like sudden but when you look at the pictures you realise it wasn't that far apart, but they are so different and it kind of shows that really well when you do stuff like that."

Here the student has explained how participating in the whole compendium of activities from the walking, exploring and taking photos, to the arrangement of selected images of contrasting places has been a cumulative learning process. It has contributed to her increased spatial awareness of the distribution of land uses within the place of study. In this student's case, the creation of a visual aesthetically appealing presentation has contributed to her place learning.



Image 21. PA's place representation

Interestingly, PA did not have access to a more sophisticated camera, but still wanted to give a panoramic affect so used his creativity to stick together photographs to convey an essence of the place to the viewer. In addition, he tried to creatively interpret the human/natural interrelationship by spinning his disposable camera around to frame the house within the trees. This design feature is evident in the top left-hand corner of his place representation in Image 21. Furthermore, this student has used arrows to link the text with the relevant feature in the presentation to ensure the viewer shares the same meaning. The representations created a balanced sense of place between human and nonhuman features and in the process demonstrated a nature/culture relationship.



Image 22. PH's poster

In this poster, Image 22, the student has used photographs to tell his story of the visit. The student has used multimodal practices of design in the sequential arrangement and layout (Jewitt et al., 2016) of images to record his visit. The first photograph acted as an introduction to his fellow group members. This was followed by a series of photographs which demonstrated the route they took and any interesting architectural features or graffiti that caught his attention along the way. He has captured the area near the railway station and at the same time the angle of shot and the close-up image of graffiti. In the lower part of his presentation the student has identified and explained geographical issues with the use of simple sketches. For example, the speed sign symbolising the need to slow down is shown adjacent to an area of bank suffering from bank erosion. This analysis of the presentation is possible through contextual knowledge. The student used information he gleaned from the tour boat guide to extend and share his interpretation of the images. While the presence of sedge grass along the base of the poster contextualises the information.

Every place representation is unique and different, suggesting each student has engaged with the place in their own way. The students have created a message they wish to share. The representations demonstrated an awareness and inclusion of a nonhuman

presence suggesting they are starting to recognise its significance in this unique place. At the same time, they have in a short space of time, an afternoon, created a sense of place. In the process they have demonstrated their ability to think creatively to integrate their human/nonhuman messages. This has been achieved through focusing on iconic features and taking care with how they are presented to their audience. The representation of the way in which the students have perceived their place of study has been enhanced through multimodal tools to communicate and share their place understanding.

6.3 Group sensory based multimodal presentation

From the outset members of Group 6 were keen to follow their interests in art and photography to capture a different sense of place. The ability to achieve this was supported through embodied sensory place fieldwork. The following representations were created from the pedagogic processes of walking and exploring, explained in the previous chapter which allowed the students to sketch, take photographs and make sound recordings of features that interested them. The following presentations are an accumulation of observations, reflections, group discussion and experimentation to produce a variety of presentations.

The following photographs demonstrate how the students built a diverse portfolio of resources from which they constructed their final presentations. These were unique to this group and reflected their combination of interests.

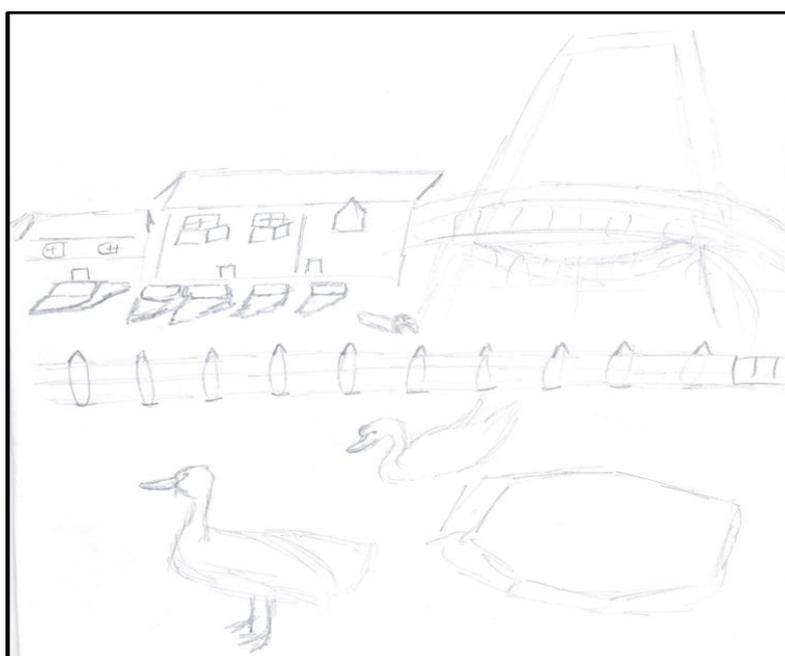


Image 23. PE's preparation sketch

In Image 23, PE had chosen to record these key features of their fieldwork destination, namely the iconic bridge, nonhuman waterfowl presence, holiday accommodation with boats moored outside. Meanwhile a fellow group member connected with nonhuman inhabitants.



Image 24. Students gathering sensory data

In Image 24 students were walking, exploring and using their autonomy to decide where they were going and what they wished to record. These embodied place experiences led to the following representations.

This sketch of a duck and textual story suggested the species may be in danger of extinction. This may not be the case it has demonstrated the group's consideration of their nonhuman other and the current threats they are facing. This understanding is shared through their textual communication. Their use of the personal pronoun further indicates their close relationship with the nonhuman.



Image25. Group 6's concern for the quality of the nonhuman's environment

In Image 25 the student has created a dramatic plea on behalf of waterfowl and picked up on the idea that wildlife is under threat if care is not taken with the use and management of the natural environment. The interest in nature and water quality was carried into the group's power point presentation in Image 26. Two members of the group shared their presentation during their group interview, while another operated the computer presentation.



Group 6's power point presentation had a strong sensory content. The students made use of their fieldwork photography that they had collected during their river cruise and walk around the broad nature trail. The yellow iris in the bottom right corner were a prominent feature of their nature walk. The use of digital photography enabled the students to capture a feel for the place. They made full use of colour picking up on the verdant green of the sedge in the bottom central image taken from the nature trail bridge.

The presentation demonstrated a transfer of knowledge from the wildlife warden. This was evidenced through the high profile given to the white water lilies and their association with good water quality. It is a very visual slide show.

The whole presentation was a truly sensory experience with the link to the incorporation of their sound recordings taken from the town centre demonstrating the noise of traffic. This was contrasted with bird song collected from birds in the trees along the path on the edge of the park.

The students exuded enthusiasm in presenting their work. They were evidently proud of what they had produced. From my perspective as the audience they came across as a co-ordinated unit. It was their own unique sensory interpretation of their study location. (Researcher reflections)

Image 26. Group 6 presenting their power point

The students were keen to take ownership of the various elements of the presentation with PC taking the photographs and PE the sound recordings. The students included their own images in the power point presentation as shown in Image 26. They introduced the power point presentation with a map to contextualise their study.

PD: Yes, first we have a map of where we went in Wroxham and we put stars on the different places we went and took information on.

Researcher: Now when you took information from those sites, were you wanting to have sounds. Did you record sounds at those sites?

PD: We got two sounds, one from the town centre and one from the park because they are very different places.

Researcher: Yes, and where did you stand in the town centre?

PD: We stood next to the road.

Researcher: Yes, and in the park, whereabouts was that?

PD: It was quite near the trees, so you could hear all the birds.

The sounds confirmed their objective of creating two very different environments, one of a busy town centre traffic and the other of bird song in the more nature rich park. They have compared and contrasted the locations according to their different sounds. The students navigated their way around using the map and the located sensory features. The spatial dimension of the presentation clearly situates it within the discipline of geography.

Researcher: That's amazing so that's by underneath the tree. Pause. Next slide. So why did you choose these fantastic evocative pictures of nature?

PE: We chose these because

PD: Because when you think of the Broads, you think of birds and swans, very common and ducks as well.

PE: So that's just showing a picture of Wroxham.

Researcher: Pause. So, these capture a sense of place and tell me why you have chosen the different slides. Why did you choose those? I feel they represent Wroxham. If anyone showed me those I would instantly think of Wroxham. Could you say why you thought they were good?

PE: Well I thought they were good because Wroxham has been very changed by tourism. I suppose so like the picture of Roys and the food hall and places like that show how people have changed it to match different people's likes so.

Group 6 used symbols to guide the audience around the route they took. This included using stars on a map to locate the sites they took sound recordings from. There were a few technical issues because one member of the group was not present, but the students managed to play their sound recordings because they were on PE's phone. The power

point presentation continued with a slide showing different birds, with the theme continued in their group artistic presentation. The multiple recorded aspects of the place were sympathetic with Massey's (2005a) conceptual understanding of place, especially its dynamic element which suggested they were starting to appreciate the place's temporal evolution. Interestingly the students appeared to include an appreciation of cultural change. This information would be difficult to communicate in text. They shared this knowledge orally. When questioned further about the overall power point production, PE explained how it had evolved:

Researcher: So, PE would you like to say something about it?

PE: So, using our senses it made the place more come to life because you were looking more at lots of different aspects like sight, and sound, and touch and smell and it created an overall picture or image of the area to create what it's like.

Here the student could confidently explain how her group had used their senses to guide their place research. This had transposed to the resulting visual stories about the place. The students had used their senses to guide their exploration which as Somerville (2008) would consider from a place of unknowing to one of becoming familiar with their study location. Here multimodality has helped with the representation of the findings but at the end of the day it is the students who have a message they wished to share with their audience. Multimodality has supported and facilitated that process through the use of distinct solid background colours (van Leeuwen, 2014) which have acted as frames to accentuate the information presented within.



Image 27. Group 6's presentation

The students in Group 6 compiled an additional poster to sum up their interpretation of the Broads. Here in Image 27 the students used framing to affect in mounting images on black or purple sugar paper or left them with a white frame. Considerable thought has gone into the design of Group 6's montage about The Broads. The process of designing the presentation supported the students to create meaning from arranging their multimodal presentations. The inclusion of a map contextualised the information.

The presentation is multimodal with the inclusion of a central poem which epitomises the Broads. This is achieved through the careful choice of words to reflect the movement of key elements of the local environment, namely birds and boats. In addition, the inclusion of hand drawn birds provided a symbolic embellishment to the poem about birds. The reference to calm water is illustrated with an image of the calm water of the Broads with a serene swan, directly underneath the poem. The students' poems will be discussed in more detail in the next chapter.

The students in creating this montage have fulfilled Kress's (2010) criteria of being active knowledge producers through making this visual production. This is particularly evident in the social way in which all the group members contributed to its construction. The design of the presentation allowed the students to use their imaginations to express their

place understanding using a variety of resources. The students here have followed a path that Kress (2010) recognised between using a variety of modes, which extends beyond linguistics, to creatively represent their information. The unique visual representation has in the process of its creation, formed visual knowledge through the design of framed place related resources. Colour has been used to affect throughout, either as a framing tool or as a means of conveying a feel for the natural environment. However, through their oral comments the students demonstrated the depth of their emplaced understanding with their relational comments about how the place has changed with tourism.

6.4i Using a video to create a place representation

Making a video has been recognised by Jewitt (2012) as a means of supporting exploratory work, in this instance, a sensory place geographical fieldwork investigation. In order to understand the video, it is necessary to reflect upon the context within which it was produced and the intended audience (Jewitt, 2012). The video was produced by Group 4 to provide a moving image demonstrating their interpretation about their perception of their fieldwork location. They were going to share it with their peers. In the process of its creation, the video has produced as Jewitt (2012) suggested, three types of information: firstly “as product” (p.3); secondly its production; and thirdly the editing process. This section will observe the students’ video through video stills or freeze-frames, an acknowledged means of providing an analytical lens (Jewitt, 2016), to examine the students’ fieldwork data collection. Still frames will be observed to analyse how the students have represented the location. Consequently, the analytical focus of this section will be on the nature of the video footage the students used to tell their story of the place.

The video analysis will employ a recognition of multimodal features that have been used during the video production and subsequent editing process to enhance the story the students are wishing to share with their audience. From a geographical viewpoint there will be an examination of where the students’ chose to position the video camera, the angle and focus of the camera and the length of time given to a feature (Jewitt, 2012). All of these techniques influence the unfolding story of the place the students will share with their audience. The question of time-space compression will be discussed in more depth in the next section which examines how the students used a video camera to record a

dynamic sense of place. Moreover, during the editing process the students have produced their own sequential interpretation of their place visit, a characteristic that will be discussed. Nevertheless, the analysis of the video content recognised that within the space of a day's visit to a place, it is only possible to provide a partial selected view of the place (Jewitt, 2012). In this instance it is a view of the place seen through the filmmakers lens, Group 4, two year 9 students. They were ably supported by members of Group 5. This was evident from the following vignette.

On observing members of Group 4 by the water in the park, they were fully focused concentrating on their subject matter. When I approached to find out what was going on in the bushes, I was told by members of Group 5 that they were filming swans. There was an aura of quiet concentration around what appeared to be an outside film set. However to get to this point I had earlier observed both groups wandering around. I need not have worried as they had obviously been exploring the place and choosing the content and locations for their filming. Their choice of location for filming, the riverside and being immersed in the parkland vegetation should not have been surprising given their earlier expressed interest in wildlife and nature.

On reflection this had required a considerable amount of thinking on their feet in terms of identifying the subject matter, finding a suitable location for filming and filming all within the space of an afternoon's work.

Once underway it was quite evident the filmmakers did not want interrupting, hence their friends provided a protective look-out for them. They knew what they wanted to achieve and did not have much time in which to do their filming. The whole process required considerable planning, foresight and vision. Furthermore, they needed the technical ability to carry out the filming as no training had been offered beforehand. Importantly they needed a supportive film crew to facilitate the whole process as Group 4 only consisted of two members.

(Researcher reflections)

The content of the video was influenced by fulfilling its original purpose to create a geographical visual moving sense of place. When observing and considering the following sequential visual stills of the students' video it should be noted that they managed to negotiate the ethical consideration of not including close-up images of their peers as not everyone in the class had agreed to participate in the research or have their photographs included. In addition, the film could only ever provide a partial view of the place because of the spatial restrictions of the area the students were permitted to explore. To this was added their limited time allocation for the activity. Consequently Group 4's decision

making about what, where and how to film their study location was continued into the editing stage where they needed to decide what story they were going to subsequently share.

6.4ii Analysing the structure and content of the video using video stills

Given the working spatial and temporal restrictions for their filming, the students used the tools available to them to create their impression and interpretation of the place. The multimodal means of supporting their filmmaking included the distance and angle of shot plus the length of time given to a feature (Jewitt, 2012). Other features the students used to capture their audience's attention included the use of panning shots and zooming in on chosen features. These decisions were further enhanced during the editing process. The time between the filming and editing gave the students an opportunity to reflect upon all their footage. This process of editing allowed the students to consider what interpretation of the place they wished to subsequently share with their audience. Consequently, it is an interactive process with the environmental stimulus and subsequently editing of the film footage. The following video stills are the result of Jewitt's (2012) third analytical category of editing.

The use of a multimodal lens to analyse the video still frames has facilitated the examination of the different modes and signs (Burn et al., 2003) used in this instance by Group 4 to produce their video about Wroxham. The following video stills are primarily examined as a means to support the students' conceptual understanding of place through the medium of creating a geographic video. It is not the intention to assess the students' skills as filmmakers, although these do appear to be quite considerable. The sequence of images examined in this section are in the same order as they occurred in the final edited video presentation. Consequently, this allowed the analysis of the video to examine the students' story of the place that they shared with the rest of the class.



Image 28. Video still frame 1

From the outset, in this edgy interpretation of the title of their video production, Group 4 set out to make an original video production. The title in Image 28 demonstrated their unique creative representation. They created a monochrome title with the place name in a bold black font which is contrasted against a white background. This eye-catching effect is further accentuated with the use of a solid black outer frame. The impact of the message is increased with the O of Wroxham being replaced by turning the number 10 on its side, to further capture the viewer's attention.



Image 29. Video still frame 2

This is followed by a wide angled view of the traditional thatched houses which are found along the waterfront of the river Bure. The text of 'A Short Film' shown in Image 29 leaves the viewer with an impression of an unfolding story about a unique place. The panning shot along the waterfront gave a dynamic element to the video. While Images 29 and 30 provide a clear introduction to a video that will fall within a documentary genre in providing information (Burn et al., 2003) about a place. The solid black frame which complements the black and white timbered buildings, added to the atmosphere and hints at a place steeped in history. The surrounding greenery and waterfront, at the time suggest there is a strong natural presence. This was confirmed with the inclusion of two swans, providing a nonhuman presence.



Image 30. Video still frame 3

Image 30 depicts Group 4's clear statement that 'All Footage By Us' suggests they are proud of their presentation and happy to take ownership of their production. The students have continued with the monochrome theme with the white font and solid black frame. The wide angled image of the waterfront buildings would have been taken by the camera placed on the side of the tour boat. Image 30 provides a panoramic visual impression of the vast expanse of water along the River Bure and its unique thatched houses.



Image 31. Video still frame 4

The filmmakers introduced themselves as the 'Backstreet Roys' as shown in Image 31 with their edgy font adding to the building drama about the unfolding place story. Backstreet Roys is presumed to be a take on the American boy band Backstreet Boys, with the boys being changed to Roys to further contextualise their production. The choice of the name Roys purposefully references the local Roys retail empire which was founded by two brothers who developed the business at the end of the nineteenth century to serve the growing tourist industry based around the coming of the railways and boating

on the Broads. The inclusion of this dimension to the study suggests the students had followed up website links they had been given prior to the visit. This information was reiterated by the tour guide on the cruise boat. The students further contextualised their identity with the place through using the same colour red font which forms the corporate logo of Roys.

The following vignette demonstrated the effect the video introduction had on its audience, the rest of the class at the end of the research.

After students from Groups 4 and 5 were interviewed, they returned to the classroom where the video was shown to their peers. It instantly captured their audience's attention. The edgy introduction was not wasted on their audience. It added a sense of authenticity, credibility and anticipation about what was about to unfold. There was a sense of excitement of what was about to follow.

It was interesting to witness the respect the film was given by the rest of the class. The short film was viewed in complete silence by all the students.

(Researcher reflections)

The rest of the video was clearly structured which was achieved through careful editing. The students had cut the video footage and re-ordered the day's sequence of activities they had experienced during their day's visit, to tell their own place story. In so doing they created visual snapshots which in themselves acted like themed paragraphs in their unfolding visual story about the spatial arrangement of the different land uses. At the same time their environmental interests began to unfold.



Image 32. Video still frame 5

The next theme related to the presence of cars which was achieved through a panning shot, where the camera moved across a horizontal plane (Rose, 2016) the car park at the edge of the town centre, shown in Image 32. The use of panning added movement (Jewitt, 2012) to the unfolding place story. Here, the students managed to accentuate the difference between the cars and the adjacent vegetation. This emphasis is intensified by the way in which the panning shot moves from the cars to the trees and back to the cars.



Image 33. Video still frame 6

The contrast between the two adjacent locations is shown in Image 33 where the audience's attention is drawn to the path leading into a sunlight distance towards the park, along a natural surface. This surface is in complete contrast to the tarmacked surface of the car park with its delineated parking spaces. It would be difficult to articulate the green of the vegetation in text. Here the students have used colour to effectively communicate their message (Kress, 2010) about the presence of nature.



Image 34. Video still frame 7

Image 34 shows the camera providing a low angled shot which concentrates on moving cars and their exhausts, suggesting the vehicles have a polluting effect on the environment. If the viewer is unaware of this change, it is reinforced with the textual statement on the screen of: “[T]he contrast is extraordinary”. To further accentuate their point, there is a change in tempo and film location. These shots demonstrated the students’ willingness to share their insights into the different spatial settings and their potential issues. These techniques provide examples of recognised means to convey understanding: “[L]anguage can tell a story whereas pictures can show it” (Burn et al., 2003, p.7). In this statement Burn and Parker (2003) have recognised the affordances of the different modes, which the students have used to affect to tell their place story. The aspects of the place the students’ chose to engage with have been influenced by the route taken by the cruise boat and their route of afternoon’s exploration. These appear to have been influenced by their interests and task to create a video place story. In their role as co-researchers, the students have demonstrated active decision-making in choosing where to go and interpreting what to video in the landscape.



Image 35. Video still frame 8

The students changed the tempo of the video as a means of introducing a different aspect of their place story, their morning’s river boat cruise. The change of story to contextualise the place within the Broads, was achieved through a shot of slow-moving footage along the river, focusing on the rich vegetation along the river bank. The ray of sunlight in Image 35 further enhances the natural significance of the scene. The burst of greenery along the river bank used colour to affect. Green is traditionally associated with nature and the environment (van Leeuwen, 2014). The ability of colour to specify precise

features is recognised by Kress et al., (2002). Image 35 demonstrated lighting in the form of a shaft of sunlight has accentuated the natural landscape.



Image 36. Video still frame 9

The shot of the swan slowing turning to face the camera and engage with the audience in Image 36 draws the section about nature and the Broads landscape to a close. This is achieved through the change in tempo with the camera following and capturing the slow movement of the swan to face the camera. The central position of the swan in the screen accentuates its significance. Furthermore, Rose (2016) stressed the significance of the angle of the shot which in this instance is a low angle, to give the swan eye contact with the audience. The swan provided a link with the town centre where they have an established presence. This is where the students were observed in the bushes on the edge of the park, filming the swans.



Image 37. Still frame 10

The video coverage moved to the town centre with a screen shot of a local building society in Image 35. This view is extended with a panning shot which slowly takes the viewer down and across Station Road, to include Barclays bank and Roys pharmacy in Image 38. This gives the audience a vicarious sense of being there.



Image 38. Video still frame 11

In Image 38 the students have captured the significance of size of the Roys retail outlets. They have demonstrated the shops have a presence either side of the main road through the town. Their entrances exist either side of the traffic crossing.



Image 39. Video still frame 12

In Image 39 the camera focused on the McDonald's fast food outlet and the yellow M sign which symbolises the multinational company. The presence of a McDonald's franchise within Roys is an interesting concept, further emphasising the dominance of Roys within

Wroxham. It is evidence of Massey's (2014) global in the local. The screen still of people adds authenticity to the story of a different place and captures the essence of a bygone tourist era. Interestingly the multi-national food outlet is housed within an old-fashioned Roys building, recognised by its cream coloured corporate paintwork, demarking its identity.



Image 40. Video still frame 13

Here the students have returned their place story to the Broads, focusing on the speed sign in Image 40 which demonstrates the need for responsible behaviour by river users. The symbolism of the speed sign was later used by members of Groups 4 and 5 in their place representations. The boat side shows where their camera was positioned.

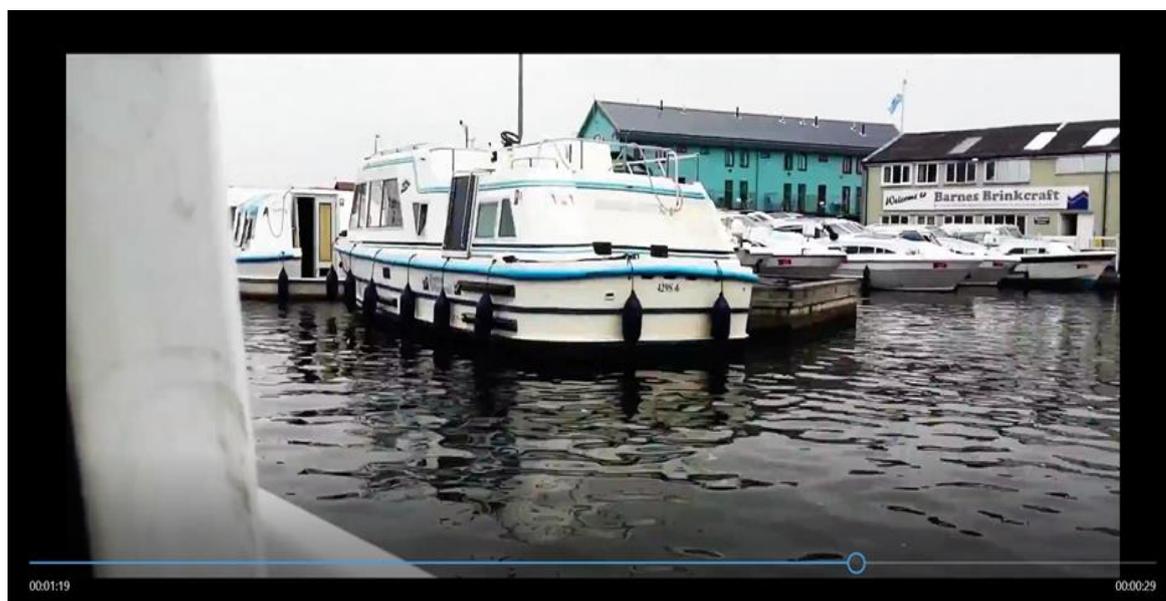


Image 41. Video still frame 14

The final place footage takes the audience along the river with shots of the boat yards in Image 41 where boats are built and hired out, further demonstrating the significance of the tourist industry to the local economy. Here there are images of boats and tourist accommodation to hire. Water provides a linking theme throughout the story of the place through its focus for wildlife and the local economy.



Image 42. Video still frame 15.

The viewer anticipates a new dimension to the place story through a slowing down in the tempo which is herald by the presence of the swan, shown in Image 42. This combination of the presence of the swan and change in tempo which accompanied its earlier appearance in the video prepares the audience for the next chapter of the unfolding place story. The swan appears to symbolise the students' recognition of the nonhuman presence and their mindfulness of its needs. In this instance the swan heralds a series of screen textual comments, each taking up the whole screen. These statements, in speech marks shown in Image 43, ensures the audience is clear about the students' interpretation of the place. They students bring the film to a close with a return to the monochrome format used at the beginning of the video. The saturated black colour filled background further increased the message in white text continuing the monochrome theme.

The statements recognise the place's integral links with the Broads through the statements "wonderful place", "the scenery is breathtaking" and "picturesque". Yet at

the same time they have captured the unique nature of the place through “friendly community” and slightly old-fashioned character with “simplistic, yet interesting”. The symbolic use of quotation marks adds a dialogic quality to the presentation. The statements act as a conclusion to Group 4’s story of the place. The inclusion of feelings about the place ensure the audience are clear about the intended video message. This is significant as feelings are more difficult to communicate in visual images. However, the visual content does encapsulate these earlier place interpretations. The students have used textual communication to convey their place meaning, especially their aesthetic place interpretations. The students have transposed their feelings across different modes to produce a truly multimodal presentation. The monochrome representation has further enhanced their message.

"Wonderful place"

"Friendly community"

"The scenery is breathtaking"

"Picturesque"

"Simplistic, yet interesting"

"The fish is quite nice"

"So is the ice-cream"

Thank you for watching

Image 43. Textual on-screen comments

Through the inclusion of textual comments "[T]he fish is quite nice" and "[S]o is the ice-cream" the students are referring to their sense of taste which is difficult to represent. The final image of "[T]hank you for watching" provided a clear ending to the film. In so doing it has ensured the video place story has a clear structure with an introduction, development of different place elements and ended with the sharing of summary comments.

Through these intermodal representations the students shared their thoughts about the place paint a rosy picture. Interestingly when members of Groups 4 and 5 were interviewed they offered a more critical view of the happenings in the place. For example, PN contributed to comments about the care of the Broads by noting:

PN: Also I think that in the town centre a lot of the drivers kinda like floor their cars like they go really fast and er if they went slower or they looked at the speed limit they'd be saving themselves money and also the environment from being polluted.

Researcher: Um so the main things you are saying, you would like to see traffic managed differently, boats managed differently. Anything else you

could suggest could be in place to look after the area there more sustainably?”

PN: “I think some of the places in the town, especially were a bit like dirty almost like people just chucked stuff there may be in corners and just rubbish could certainly be tidied up to prevent animals dying because of it or like um just taken away so they could be broken down and re-used.”

These comments relating to concerns about vehicle pollution are compatible with the visual story portrayed in the video, especially in video still frame 34 with a low angled shot of a car exhausts. The student in the second comment demonstrated his concern for the environment and provided clear instances where he felt improvements could be made to increase the amount of material recycled. Here, PN related the benefits of recycling to the nonhuman population. The students’ concern about the nonhuman presence was evident in the amount of footage given to the swan. It is understandable that members of Group 4 would not like to openly criticise a place on a video with a wider audience. This is a potential area for future discussion when introducing students to making a place video.

In editing the video, the students displayed “continuity cutting” (Rose, 2016, p.77) where shots have been re-arranged to allow the students’ story of the place to have a continuous flow. The re-ordering of events confirms Burn et al.’s (2003) findings that different spatial and temporal configurations do create varying interpretations. By placing information about the Broads after the section on the town, it further contextualised the place. It visually showcased the place as a service centre for tourists.

The students have displayed methodological expertise in the making of the video and conceptual understanding in the choice of material to represent their interpretation of the study location. The video has confirmed Jewitt’s (2012) vision of videos being able to share with their audience, an embodied sense of being there. In the process the students’ confirmed Garrett’s (2010) ability of a video to provide a sense of place, especially in this instance through the use of contextual information. Group 4 have also shared their perception of being in the place. Moreover Kitchen (2010) celebrates the ability of a video to provide a platform to share students’ views, in this instance about a place. In addition, the video provided an insight into the students’ conceptual understanding (Kitchen, 2010) about a place. The view the students shared of their place of study in this instance was of a unique beautiful location with outstanding natural beauty as

demonstrated in the video still frames. In addition, their concerns about the presence of traffic were evident in slide 34.

The students in Group 4 have represented a moving image of their place of study enhanced by the multimodal filming techniques of varying the angle of shot, proximity of the video camera and focus to tell their place story. Framing has been used to accentuate the message within each scene. They have used time-lapsed photography to compress over an hour's boat journey into a matter of seconds and in the process demonstrated their technical ability to do this. In the creation of the video the students have included different modal means, including kinaesthetic in moving around to observe and choose their video recording sites. During the filming the students made good use of filming techniques like panning in moving the camera around sites to provide an overview, for example showing the link between the car park and the adjacent pathway to provide an overview of the place. Furthermore, they changed the tempo of the film to allow the swan to slowly move and provide eye contact with the audience. During the editing the students used multimodal means of colour in their focus on green vegetation, the corporate cream and red colour of Roys and use of monochrome to enhance their place message. They used a black border to focus the viewer's attention on the information within the frame. The video was structured in such a way to have a clear beginning, middle and end. This format would qualify the video representation as a multimodal means of supporting the development of a place story. Consequently, this mode of representation is representative of Somerville's (2010) embodied place learning where a relationship to place is developed through stories, in this instance using a video.

The video contributed geographical information about a place in demonstrating the spatial relations between the different land uses and identified possible contentious issues. In the process the students have negotiated a path through these diverse place happenings which Massey (2005a) deemed should include the human and nonhuman aspects of a place. At the same time the students' video addressed Massey's (2005) concern about the portrayal of place as being static. Instead through their compressing the boat journey into a matter of seconds they have managed to negotiate time and space. In so doing the students have left the viewer with an impression that their place story is not a closed one. They have achieved this through their ability to manipulate technology and fulfilled their original aim of creating a "cinematic masterpiece".

6.5 Summary

In this chapter the students have used the framework of multimodality to support their ability to represent their embodied sensory place fieldwork data. This was achieved through creating a multimodal presentation including a variety of artefacts like photographs, sketches, a video and textual comments. Multimodality provided the means to analyse how the students used their individual interpretations and resources from their place of study to create meaning. This was achieved through examining multimodal features like the use of colour, spacing and framing to convey place knowledge. Providing the students with blank sheets of A3 paper to design the layout of their resources stimulated the students to creatively represent their findings. In this study, design has fulfilled its identified potential by Kress (2010, 2014) to stimulate the students to communicate their own and group messages about their place of study.

The analysis of still frames of a video echoed the earlier comments about the use of framing and sequencing to tell a story through the students' eyes about a place. The story had a clear beginning through introductory scene setting and credits. This was followed by a clear sequential tour of the place with underlying environmental messages. These were achieved through panning shots, changes in tempo, lighting, focus and angle of shot (Jewitt, 2012). The use of time space compression ensured a morning's river journey was reduced to a short sequence while still sharing the spatial sequence of the cruise journey with the audience. The whole presentation gave the viewer a vicarious sense of place. In the process it confirmed Garrett's (2010) argument about videos providing a sensory place experience. The inclusion of textual comments in a monochrome presentation ensured the audience shared the students' interpretation of the place.

The analysis of a selection of the students' representations has demonstrated their ability to convey their meaning across a variety of modes, including visual, textual and oral. The analysis of the posters indicated the students' appreciation of the multiple elements of their study location. During the process they have signalled their ability to appreciate the interrelationship between nature and culture (Somerville, 2015) together with the spatial and temporal nature of the place (Massey, 2005a) including changing cultural influences.

Chapter 7

Analysis and Findings 3 – Place Knowledge

7.1 Introduction

This chapter explores the culmination of adopting Somerville's (2010) approach of learning about place via sensory embodied experiences and developing understanding through stories. This alternative approach to the study of place has supported these geography KS3 students to produce knowledge in different ways through multimodal presentations. The students' have started to appreciate the dynamic nature of place with its multiple elements (Massey, 2005a). These include the meeting of human and nonhuman elements and their evolving trajectories (Massey, 2005a). The aim here is to examine how the students have used their reflective understanding of experiencing the place to write poems, acronyms, postcards, produce a power point and group presentations and comment on the state of litter. All these activities demonstrate the diversity of ways in which the students have engaged with the place. This is commensurate with Somerville's (2010) interpretation of place stories including a variety of representations. In so doing it is developing the interpretation of the students' understanding about their place of study they represented in the previous chapter.

There is an overlap with the previous two chapters through the developing nature of Somerville's (Somerville et al., 2015) place pedagogy that is perceived to be a relational process. Within Somerville's pedagogic framework (Somerville et al., 2011) there are three key evolving elements, namely the teacher, the learner and knowledge which is interpreted here as developing around the place of study. This study has encouraged the students to have a voice in shaping the trajectory of their group research so ensuring a diversity of presentations. The students in working in groups have benefited from social interaction with their peers to discuss their ideas. This approach has supported the students to individually build their own place understanding. Consequently, the representational process has been broad to support the students to follow their own interests and place connections with the overall aim of creating a deeper place connection. The approach has encouraged the students to be creative in developing their place knowledge from 'listening' to what the place has taught them.

Throughout the Chapter developing place knowledge has elements of the conceptual understanding of place expressed by Massey and Somerville. There is considerable

shared ground, between Somerville (2010, 2013b) and Massey (2005a) in the significance of all aspects of the environment, human and nonhuman. In Somerville's (2010, 2013b) case it stems from her personal interest in ecology and her appreciation of Aboriginal and Torres Strait Islander onto-epistemology which links nature and culture. In Massey's (2005a) case the human and nonhuman form an integral part of her conception of a place, each with their own trajectories which require 'negotiation'. Consequently, the students' recognition of the nonhuman presence should come as no surprise, as they are a recognised part of the place. This Chapter will examine how they negotiate their presence.

The structure of the chapter will examine a variety of the students' place stories. Each should be interpreted through Somerville's (2010) broad understanding of stories in a variety of representations. These are influenced by her interdisciplinary Australian context of exploring how to relate places and the environment drawing on indigenous and non-indigenous knowledge. The chosen examples broadly sit within the following headings of being spatial, and temporal while providing a human and nonhuman perspective which is cognitive and affective. The findings include extracts from the transcripts of interviews with the students and Class Teacher which is commensurate with the sensory framework of this research. There is a culminating section where the students start to consider telling their place story which has a historical origin, unfolding geographical present with a prospective future.

7.2 A spatial place story

The piece of work being examined here in Image 44 has developed from the student using her place knowledge and earlier multimodal place representation to create an annotated synthesis of her findings. The presentation is multimodal in the use of a variety of modes to convey her place understanding. These include visual images which are linked by colour co-ordinated symbols, framing and lines to related textual comments. The following visual presentation demonstrated the central position afforded to the place map to locate the chosen features which are developed in adjacent images and text.

following a western tradition of reading from left to right. In addition, this image has a short accompanying text which appears to act as an introduction in terms of setting the scene for information about a tourist destination by stating: "There are many shops in Wroxham." The reader is soon aware of the student's individual interpretation of place in the next textual comment, which raises and shares with the reader environmental issues the place is facing: "Broads Tour has lots of boats that tourists and locals can ride on. Some are tours and some are self-drive. This can sometimes cause problems as they do not always listen to the speed limit and go too fast which causes more wash and more bank erosion". Here the student has used geographical vocabulary to tell her place story. This is indicative of Lambert's (2011) recognition of the subject's technical vocabulary which forms part of its 'core knowledge'. To this Lambert (2011) added conceptual knowledge which he referred to as geography's 'grammar'. Here PQ has used both to explain the geographical processes at work in creating bank erosion in her developing conceptual understanding. Place itself was recognised by Lambert (2017) along with space and environment as geography's key co-ordinating ideas. For example, PQ has used the word "erosion" and explained how the physical process occurred through speeding boats causing bank erosion. The student has demonstrated relational thinking in linking her conceptual understanding of bank erosion to river boat users along the River Bure. Here PQ has demonstrated her ability to think geographically. Thinking geographically is as the Geographical Association (GA) explained part of the subject's *raison d'être*: "[T]hinking geographically is not everyday thinking. If we thought these were the same, there would be little point in having geography lessons, or specialist geography teachers who are grounded in the discipline" (GA, 2012). In this unfolding place story PQ is combining her geographical knowledge with Somerville's (2010) alternative place pedagogy to gain a deeper place understanding and tell her place story.

The next image of the village sign has been included to further contextualise the place study. In the following narrative, PQ delimits the area of her study: "Although there are 2 parts of this village, Wroxham and Hoveton they are collectively called Wroxham; however the majority of the facilities are actually located in Hoveton. Wroxham is mainly water and rivers including the River Bure which passes through Wroxham and Wroxham Broads which is home to many boats and wherries. Each part has its own sign post (village post)."

Each image has been used to discuss a different aspect of the place. During the discussion PQ engaged with possible contentious issues or Somerville's (2010) third element of her place study which has been interpreted in this western context as providing different interpretations. Here PQ has used the correct terminology to introduce the vessels traditionally used to carry cargo, wherries adding to her developing geographical vocabulary.

The following images and narratives demonstrate how the place has evolved as a tourist destination. In the image in the top right-hand corner, the text has become a major "carrier of meaning" (Kress, 2010, p.60) in relation to the adjoining image. Here PQ has recognised the dual ability of the green scenery to attract tourists while providing a habitat for plants and animals. In this unfolding place story, the student has referred to the multiple elements of the place, including its human and nonhuman characteristics. The image displaying a view of the vast open nature of the Broads waterscape, contextualises the student's understanding of geography's grammatical core knowledge (Lambert, 2011) namely eutrophication as explained in the following text. "Much of the water around Wroxham is bad quality due to eutrophication, however, the people that care about the Broads are trying to improve water quality by evacuating all the fish from Wroxham Broad to a temporary home which will give the water fleas a chance to grow back and eat the algae which is ruining water quality."

In this explanation the student has demonstrated a clear geographical understanding of the negative processes at the work in the formation of eutrophication and how it is being managed in this situation. The explanation of how biomanipulation is being practised to give water fleas a chance to develop to be able to eat the algae to improve the water quality, suggests the students understands the concept. The image acts in this instance as a contextual prompt to reinforce the meaning. This information was shared with the students by the tour boat guide and the wildlife warden. The reader is left in no doubt that PQ is writing an informed geographical place story and provided evidence of her ability to 'think geographically' (GA, 2012). The ability to think geographically is perceived as being able to use and apply geographical ideas (Jackson, 2006) which PQ displayed in the development of interrelating issues relating to place and environment.

In the last textual comment which acted as a conclusion to the student's place story, PQ evaluatively summed up the geographical place happenings: "[T]here are quite a few

holiday homes and apartments near to the river in Wroxham and Hoveton. This would attract tourists which causes more money for companies such as Broads Tour and shops such as Roys. However, this can add to the amount of bank erosion which comes from wake from a boat and littering.”

In the text, which again conveys the “major informational weight” (Kress, 2010, p.60) the student has considered the numerous trajectories at work in the place while explaining how Wroxham and Hoveton are referred to as one place, Wroxham. These processes have related physical and human factors through her relational thinking to bank erosion, eutrophication and their management. At the same time the student has explained the positive and negative effects of tourism on the local economy and environment. The story has included local contextual information of wherries and local companies like Roys and Broads Tours. Throughout the geographical story the student has used Lambert’s (2017) key organising concepts of place, space and environment. In the presentation the student has provided an overview of the place through the inclusion of local conceptual and contextual knowledge. While the creative representation has been enhanced with the use of colour framing linked to matching located symbols which have added contextual located knowledge to the student’s place story.

7.3 Group investigations

7.3i A multimodal story about the changing face of Wroxham

The evolution of the following power point presentation was influenced by the students’ limited access to a computer room. Eventually Group 8 managed to gain entry with another class and worked to produce the following story about the evolution of tourism in their study location. They started by gaining background information about the place through researching a book about the place and using the internet to find old photographs to examine how the place had changed, as shown in Image 7b. This section examines the steps the students took to create their power point presentation and their sequence of slides. The presentation embraced their research into the changing temporal and spatial nature of their study location together with their emplaced fieldwork knowledge. The unfolding story included the results of their secondary research and primary data in the form of photographs from their fieldwork.

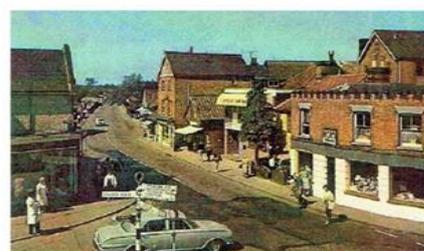
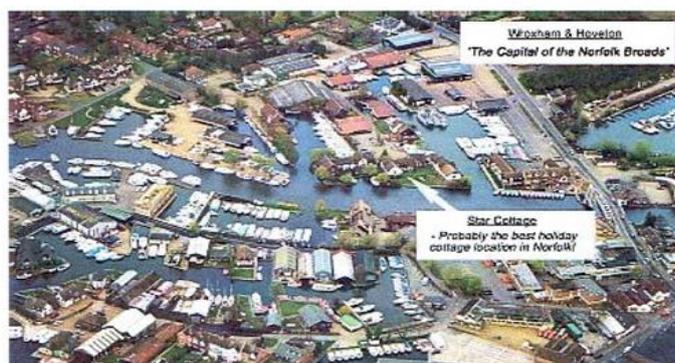


Image 45. A selection of Group 8's research into the changing face of Wroxham

Image 45 provides a historical context from the old images collected by Group 8 which added depth to their developing knowledge about the place and visually demonstrated how it had changed over time. The research informed the students' understanding of how the evolution of tourism had changed the face of the place. The study is insightful especially as Jewitt (2008) was critical of the growing visual influence for not including a historical perspective. These students have included a historical perspective which they used to contextualise their place story. In providing a historical view it has helped the students to perceive the dynamic nature of the place. In so doing it integrates a spatial

and temporal view, which Massey (2005a) considered provided a more open understanding of place.

The students' decision to present their information about the changing nature of Wroxham in a power point presentation meant they became involved in decisions about the design and format of their slides. To create their story they needed to negotiate what to include and how to support their message through the use of images and narrative. This was apparent in their opening slide in Image 46 pleasure boats are 'foregrounded'

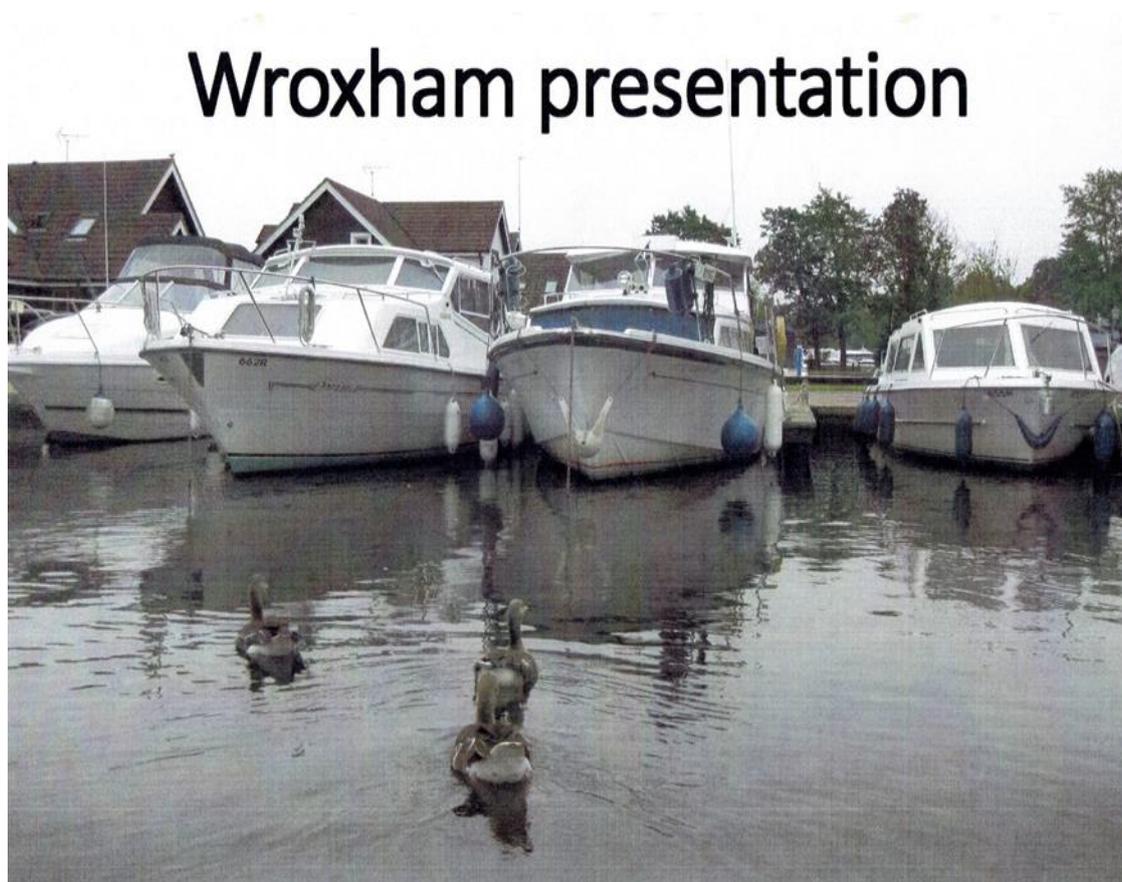


Image 46. Introductory slide.

(Kress, 2010) relative to the textual title which contextualises the location of the study. The centrally positioned title which is read from left to right, confirms Jewitt's (2005) findings that there are similarities between the screen and the page. The slide displayed a low angled camera shot to emphasise the significance of water and pleasure boats in the unfolding place story. The slide acts as a visual scene setting introduction which includes the nonhuman presence of geese who also appear to be sharing the same view.

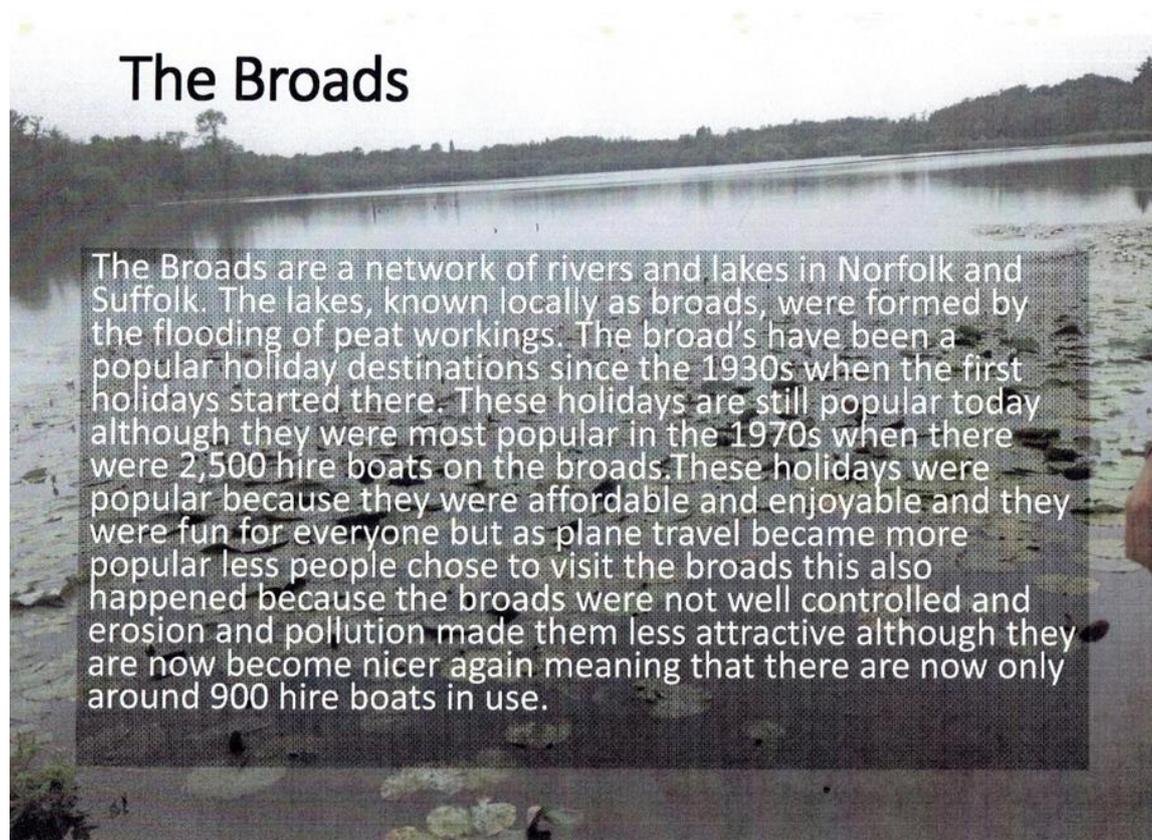


Image 47. Slide 2 – background information

In the second slide, shown in Image 47 the text carried the “major informational weight” (Kress, 2010, p.60) in relation to the background low angled image of a broad. The textual information provides a temporal insight into the evolution of the Broads. The information is evidently in the students’ own words because of the length of the last sentence. There are echoes of the tour guide’s talk in the narrative. The following sentence demonstrated place knowledge about how and why tourism in the Broads has changed: “ These holidays were popular because they were affordable and enjoyable and they were fun for everyone but as plane travel became more popular less people chose to visit the broads this also happened because the broads were not well controlled and erosion and pollution made them less attractive although they are now become nicer again meaning that there are now only around 900 hire boats in use”.

This slide, Image 47, provided further historical information to explain how tourism has changed. The students demonstrated relational thinking in explaining how changes in transport, increased accessibility of foreign tourist holiday destinations and declining water quality contributed to a decrease in tourism in the Broads.



Image 48. Collage of information about Broad nature reserve

The students included a collage of photographs they took to show their nature trail as demonstrated in Image 48. They arranged these around a central map of the route to give a vicarious insight to the whole experience. The images provided an insight into the rich flora and fauna. The students are conveying a strong ecological message and appeared to have connected with their nonhuman surroundings. Consequently, the students have demonstrated a nature rich environment. The images chronicle the students' embodied sensory experience in observing, walking and exploring the destination. The students have not succumbed to Massey's (2005a) recognised trend of reducing the spatial to the textual and have instead shared their own sensory place experience, through the medium of their own photographs.



Image 49. Highlights from the river cruise

In this collage of their photographs in Image 49 the students have managed to introduce the viewer to the diversity of land uses they experienced during their cruise. In so doing they have introduced a multiplicity of visual insights which demonstrate the spatial juxtaposition of nature, people and their economic use of the place. The slide can be interpreted as an example of Somerville's (2015) use of affect to demonstrate how the students were affected by these surroundings in their decision to record the images and in their selection for inclusion in this slide.

In the following slide, Image 50, the students have recorded the diversity of Roys' retail stores which included a department store, pharmacy, toy shop, McDonald's food outlet and a food hall in this one location. The semiosis or meaning making (Kress, 2010) is achieved through lines to spatially connect the various Roys' retail outlets to their location on a central map of the place. The students have captured the firm's corporate identity through including images of the red signage and cream paintwork. In Image 50 the arrangement of the images ensured they are a major "carrier of meaning" (Kress, 2010, p.60). However, the students have ensured this is a geographical representation through their emphasis on their relative spatial location within their place of study.

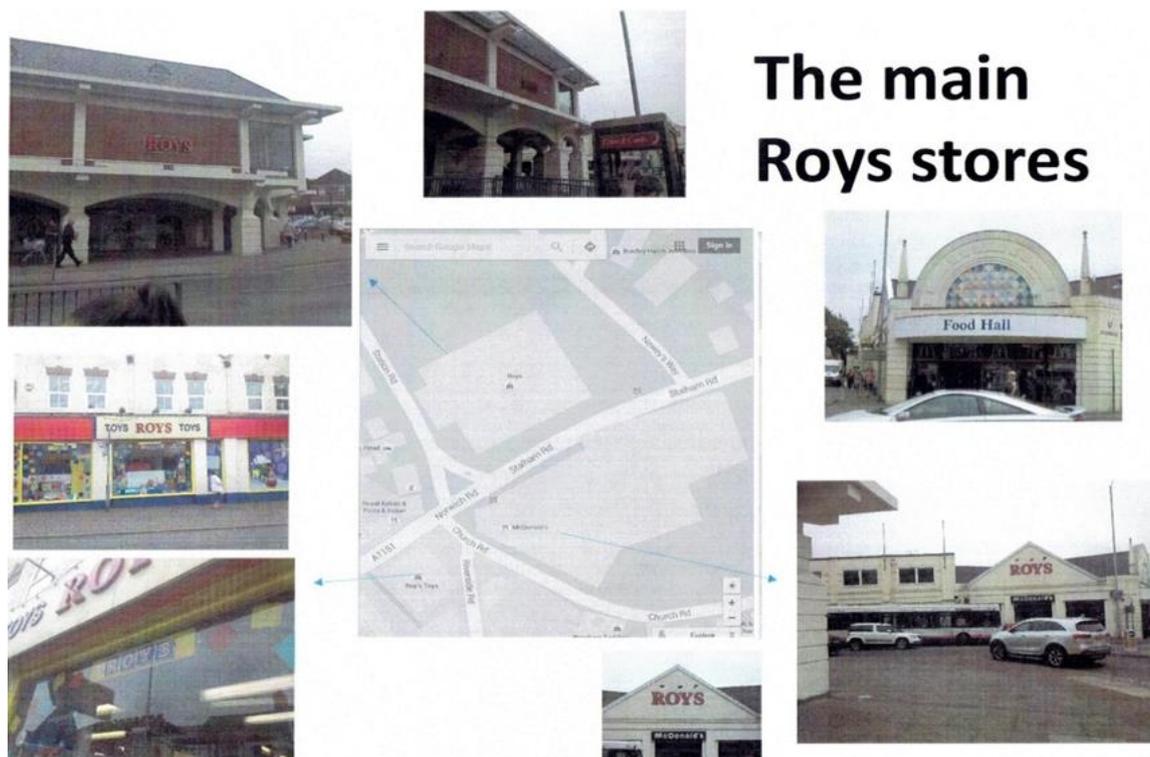


Image 50. The Roys' retail empire

The next two Images 51 and 52 demonstrate the students' ability to interpret the negative and positive effects of tourism in the local environment from their walk around the place. The students' have critically engaged with the landscape and in the process have applied Gruenewald's (2003b) concepts of 'deconstruction' and 'reinhabitation'. The process of amassing this information has demonstrated the students' growing ability to think geographically.



Image 51. Positive aspects of tourism

The way in which the students gathered photographic evidence demonstrated they had applied a critical lens while walking and exploring their study location. The design of the title 'Positive Tourism in Wroxham' in Image 51 forms a visual metaphor of the tourist sign directly underneath it. The students' title is sympathetic to Kress's (2010) interpretation of a frame as an analogy. In addition, the tourist sign adds information about the positive economic benefits of tourism in terms of hotel beds and the boat hire business. The impact of the message is increased with the intense use of the same shade of blue either in the written or background of the signs. The design of the slide shows thought has been given to creating knowledge (Kress, 2010) about local income sources from tourism. This has been achieved through the inclusion of signs advertising local fish and chips, an ice cone and advertisements of activities like boat tours and Bewilderwood, a local tourist destination. The collage of images has made use of colour and signage to demonstrate the traditional nature of tourism facilities.



Figure 52. Negative impacts of tourism

In Figure 52 the students found evidence of negative environmental features on their exploratory walk. These have been assigned to tourism but could equally have been caused by locals. However, the students have identified negative features that detract from the appeal of the place for tourists. The inclusion of a textual list in the top left-hand corner of the slides ensures the viewer shares the same meaning as the slide designer. Each image on the slide has included some form of tessellated brickwork to create a themed affect. This shared design feature links the message where image is the major “carrier of meaning” (Kress, 2010, p.60). There is an underlying ethical message about the ideology of these images, in terms of the negative anti-social behaviour in dropping litter and affecting the aesthetics of a place. This is reflective of Kress’s (2010) view that multimodality can convey powerful messages.

To achieve the combined message of the two slides of framed information the students passed through a series of steps which Kress (2010) recognised as initially requiring a reaction to a stimulus in the environment. These stimuli related to recognisable positive and negative factors evident in the landscape. The slide acted as a frame for the arranged images and their related themes. The slides include a remarkable amount of multimodal techniques considering the students have not been formally introduced to the “domain of enquiry” (Kress, 2014, p.60). This further indicates how much they have absorbed from

their potential out of school use of modern technology as a means of everyday communication. The combination of a Somervillian pedagogy with the inclusion of geography fieldwork has supported the students to walk, explore and collect visual evidence for their place story. Throughout their power point slides the members of Group 8 have confirmed Somerville's vision that stories provide a means of creating meaning through a variety of formats. In this instance a power point presentation. This was combined with secondary research which has enabled the students to create a knowledgeable presentation about the evolution of tourism in their study location. The students through their emphasis on the unfolding nature of tourism have left an impression of its temporal nature that is commensurate with Massey's (2005a) view of spatial trajectories.

7.3ii A litter investigation

Group 7 decided to carry out a litter study for their place investigation. Their report falls within Somerville's (2010) broad description of a story through its use of photography, graphical representation, oral and written information to create fresh understanding about the issue of litter. The presentation about litter includes a range of modal representations. This section discusses the knowledge the students discovered and any issues they encountered that they felt hindered the creation of their study.

Concern was expressed by other students about the potential hazardous risk to wildlife from litter, for example members of Group 2 and PU in his poster. Litter is an environmental issue that has wider implications than the students' local place study. Massey (2014) has acknowledge litter to be an environmental issue facing our global place from our local actions having global repercussions and calls for more responsible behaviour. Indeed, she explained that students should be aware of contentious issues and be prepared to contribute to their discussion (Massey, 2014).

From the outset, Group 7 decided to do a litter survey and were well prepared with their quadrat, trundle wheel, tape measure, cameras and recording sheet to tackle the study. The following vignette demonstrates how on arrival at their study destination, after appraising the situation, the students became increasingly incensed with the problem.

I observed PA and PB looking for suitable sites to carry out their litter survey. They eventually chose one near the riverside in the park and another between the Broads Authority information centre and Roys car park. They did struggle with only have two members in their group with juggling taking photographs, measuring distances between pieces of litter and the nearest litter bin. In addition, they needed to record their information. They lacked enough hands to carry out all the activities, so I offered to hold some of the equipment. This gave me an opportunity to observe the happenings at first hand. The pair worked collaboratively in a purposeful manner.

They started out quite indignant, especially about litter being dropped near benches where wildlife was found adjacent to the water. They identified the litter as a potential risk factor for wildlife. They were interested to measure the distance between the litter and the nearest bin. This led the students to suggest more care needed to be taken in the spacing of litter bins.

Their indignation increased when they tackled the second site which was in front of what appeared to be a derelict building directly opposite Roys car park. Litter had evidently been thrown into or over the hedge or in front of this apparently uncared for site. They started to measure the distance to the nearest bin, which would have required the public to cross the road to the car park.

The whole exercise did leave the students questioning whether if more bins were added, would the people who dropped the litter actually use them.

(Researcher reflections)

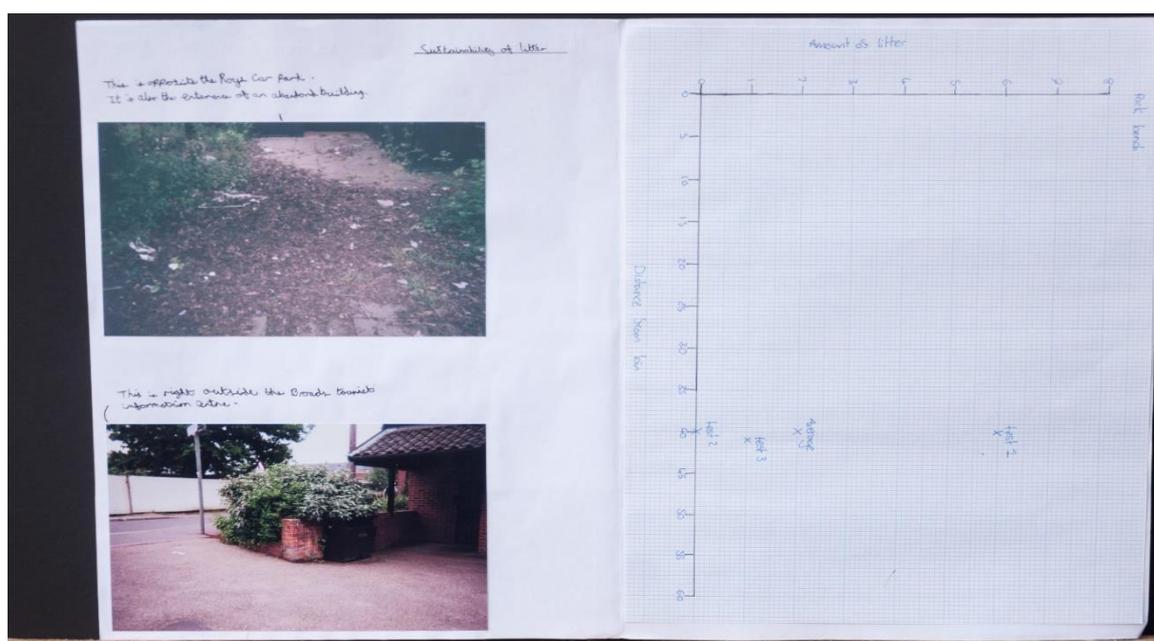


Figure 53. An extract from Group 7's litter survey.

Image 53 is an extract from the students' results which were displayed in a written report along with graphs and supported by photographic evidence of the problem. It was a multimodal presentation. The interview extract further contextualised the students' involvement and understanding of the issue. The following narrative took place after PA had explained his unique photograph of a house situated within trees.

Researcher: That's really interesting. Um now did you, what did you find out from your litter survey? Could you tell me something about this because I remember seeing you a number of times carefully collecting and looking at its location. What did you find?

PA: Well if you look at our graphs here the Broads office there is a lot of litter here where there is a decent amount of litter where people have dropped it. We took some notes about where it was hidden behind the hedgerows and it was hard to see, it was almost concealed where it should have been put in the bin but no one saw it which is a shame really because it could be easier to see and the Roys car park we learnt there was actually a lot of litter but it was really far away from a bin. It was like 40-50 metres away from a bin it was silly for a built-up area like the Broads. The wildlife gets affected by the amount of litter that can be dropped it should be really easy to show which is a shame. It should have bins every 10 metres to make sure no one is going to drop their litter which I think is a real shame. Then we took another result of the um near the actual water here and there was also 40 metres from a bin here which is quite surprising because it is really close to the water, it was like near to the Broads Office, you would go down a path to get to the water's edge and people would go to eat their lunch and sit on this park bench where we did our measurements right and there was actually 40 metres away but could have easily just moved that along and not made them all in one area and not in another and we took a lot of information from one area but if the bins were not all in one area but were more spread out it would be a lot better for the Broads. Um.

In this narrative the student demonstrated the group's ability to follow an interest, independently carry out a survey and synthesise the information. Here PA has explained how the students collected their data, appraised it and produce a critical analysis of the situation. This included a recognition of the risk of litter for wildlife. In addition, PA expressed an opinion about the problem and postulated a possible solution in terms of making suggestions for more suitable positioning of litter bins. However, the students felt their survey could have been more comprehensive if they had been allowed to take readings from a wider area. Unfortunately, this wider exploration was not possible because of health and safety and time constraints.

Here the student took part in the debate about the litter issue and demonstrated his ability to express himself in a multimodal manner to support his unfolding litter story. At the same time, he has demonstrated how participation in this pedagogic approach has facilitated his ability to take part in Massey's (2014) societal debate from using his small scale place knowledge. The students have followed their curiosity and concern about the litter and related it to their place of study.

7.4 A swan's perspective

Group 2 pursued their interest in swans which was stimulated from observing their presence during their visit. The students recorded their opinions and interpretations through a storyboard and annotated artwork. The following place story is through the lens of a swan creating what could be termed a swan's story.

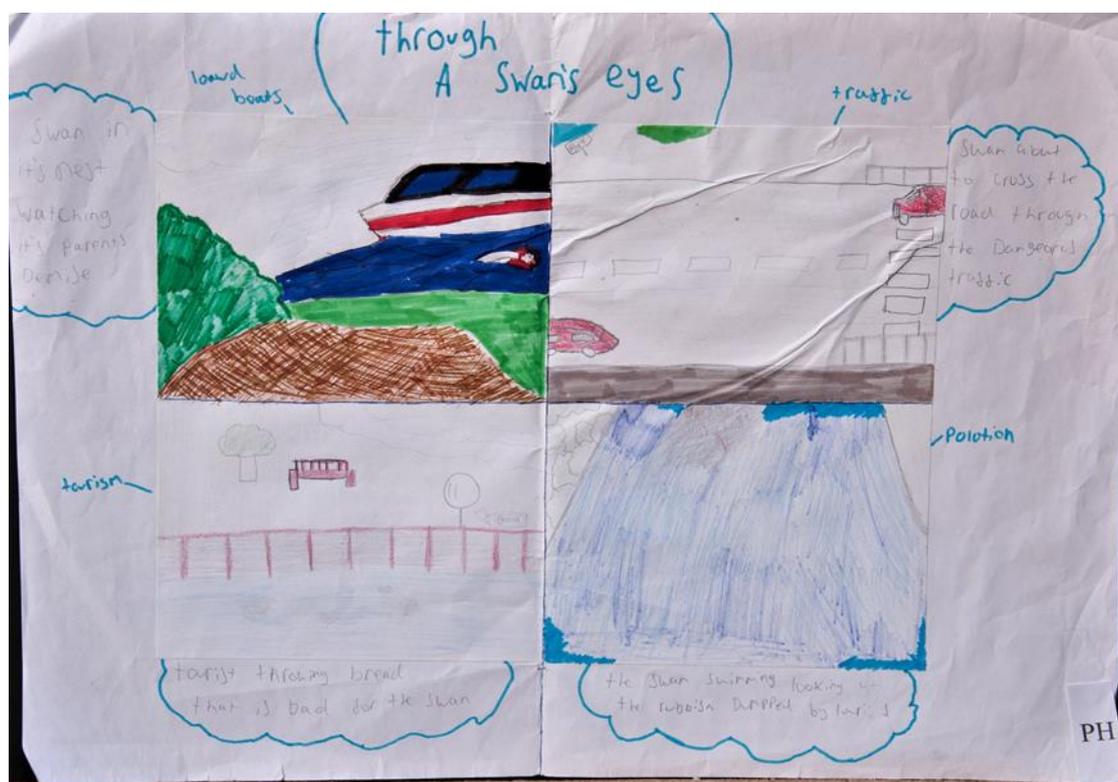


Image 54. PH's swan's view

In this storyboard PH has interpreted the place through his perceptions of the swan's threats to its habitat entitled "through a swan's eyes". Here the swan's lens is used to identify threats facing the species in this place. The multimodal presentation leaves the reader in no doubt about PH's message. The text is adjacent to the top left image and reads: "swan in its nest watching its parents' demise" reflects the image of a large motor boat in an intermodal representation. There is an impression of a fast-moving boat

which PH has also embellished with the description “loud boats”. The story unfolds with images of threats to the swan. The next image in the top right-hand corner continues the story with the risk of traffic: “swan about to cross the road through the dangerous traffic”. Interestingly the vehicle is depicted as being on the zebra crossing. This brings into question whether the swan would have the same rights if it decided to use a zebra crossing as a human. The risk is further developed in the bottom right image with the single word “tourism” and an adjacent text of: “tourists throwing bread that is bad for the swan”. This knowledge about the inappropriate nature of bread for the swan’s diet was introduced by the tour guide. The bottom right image addresses the risk of pollution for swans with the narrative: “the swan swimming looking at the rubbish dumped by tourists”. Here PH portrayed the tourists as appearing to be the cause of the negative issues they are facing. Each image develops a different theme and develops the story, in a similar way to using paragraphs in an essay.

However, the story has stimulated PH to appreciate the place is shared between humans and nonhumans, both of whom have needs and require consideration. His presentation addresses the nature/culture binary in a questioning way. It is thoughtful with an underlying ethical message about humans being more aware of the effects of their actions on wildlife. In recognising the presence of the swans, PH has negotiated their needs and suggested ways in which their lives could be improved if more thought and awareness was given to their presence by humans. In negotiating their situation PH has recognised the power differentials involved and is starting to conceptualise the problems the swan is facing in its life, which he recognised as emanating from human actions. This recognition comes with a realisation of the need to adopt a more responsible attitude for our actions in the local environment. This thinking is reminiscent of Massey’s (2004) argument for the local having agency and the need to take responsibility for our actions in local places (Massey, 2005a). This thinking is apparent in her recognition that public spaces are regulated, often by unwritten codes of practice (Massey, 2005a).

The students have perceived the precarious question of how nature is regulated and where do rules apply. There are parallels with Massey’s observations about pigeons in London: “[I]n London there has been the sharpest of spats over the presence of pigeons (a tourist attraction, beloved by all, animals with rights, *versus* pigeons as a flying, feathered health hazard) in Trafalgar Square.” (Massey, 2005a, p.152, italics in original). In this narrative Massey recognised the contentious nature of managing and regulating

public spaces, which requires a need to negotiate regulations between human and nonhuman inhabitants. The regulation of nature and their rights is a controversial issue that PH has touched upon. This theme was apparent in Chapter 6 when PN stuck a river speed limit over the head of a swan, the aggrieved party from unthoughtful human actions. It is an area that requires careful negotiation. At the same time, Massey cautioned against taking a romantic view of the nonhuman, which she acknowledged (2005b) can be perceived as synonymous with nature. This led her to ask the controversial question of whether a place needs a human presence to be considered a place (Massey, 2005b). The politics of negotiating a different nonhuman presence is beyond this current research.

The tour guide triggered the students' imaginations through referring to the damage speeding boats can create for the waterside banks, which affects nesting waterfowl. The overall impact of this information was apparent from PN during his interview:

Researcher: Now what do you feel if anything you got out of taking part in the research?

PN: I think I gained a like a better understanding of how um like boats speeding can ruin the banks and destroys um the wildlife and the animals that swim in it and also personally I think I learnt better film making tricks and stuff when taking footage of er birds and wildlife.

The student acknowledged how he felt the trip had left him with greater knowledge about how humans' actions can impact on nature. It triggered his imagination to seek out swans who were the stars of his video as demonstrated in Chapter 6. At the same time the desire to tell an environmental place story with a wildlife presence required PN to improve his filming techniques.

Added to this there was discussion about the inappropriate way in which swans are fed by the public. This was mentioned by PH in his interview:

Researcher: Has your um study here influenced how you see the environment as well? Wildlife, nature, do you feel differently towards it? No?

PH: Maybe a little bit, if I see a swan next time I'll sort of remember like not to feed it because it might be harmful to it which I wouldn't have known before this. Yeah.

These thoughts have been further developed in PH's storyboard "Through a Swan's Eyes".

Somerville et al., (2015) recognised how concerns about the nonhuman, are being considered within wider discussions relating to ecological issues and human activities. These challenges are being brought together under the wider umbrella term of posthuman studies (Somerville et al., 2015). Furthermore Somerville et al., (2015) recognise their presence in early years education they have remarked there appears to be limited space for studying these broader ecological issues in the busy primary school curriculum.

However, when encompassing the wider implications for the way in which a place is managed, Massey (2005b) suggested the nonhuman perspective required political consideration. This was evident in comments she made when reviewing *Amazonia: A Natural History* (2002) by Hugh Raffles, which led Massey (2005b) to suggest: “[M]ight there not be a case for making nature/the nonhuman *more* active an agent?” (Massey, 2005b, p.355, italics in original). Here Massey is clearly aligning the nonhuman with nature and arguing for it having a higher profile, to the extent of becoming an active player. This narrative suggests if the nonhuman is to have increased agency it will need a political voice. It could be argued that this is apparent through the work of existing charities like the RSPB (Royal Society for the Protection of Birds) or Wildlife Trusts.

The nonhuman perspective has relevance for the students’ study of place because of the spatial significance of the nonhuman perspective within it. A presence not unnoticed by Massey (2005b): “[P]laces are moments of negotiation, certainly, between material, discursive, human and nonhuman; they are also points of intersection between contrasting temporalities and spatialities.” (Massey, 2005b, p.356). Here Massey in arguing for a broader remit for all elements in the study of place would require greater negotiation. However, it could be argued to not include all these constituent parts of a place would be negligent.

At the same time, the students enjoyed their nature walk with the local wildlife warden and studying the nonhuman. Indeed, PN felt the nature walk could have been extended, a point he added to his group’s general discussion about how the research could be improved:

PN: “I think the nature walk could be a bit longer because we kind of rushed through it a bit but maybe it could have been. I think the boat trip could have been a bit shorter.”

These are fair comments but unfortunately the students were following a tight schedule and it did take a while for the boat to get out of the built-up area to reach the open water of the Broads. While PP in Group 8 reiterated PN's enjoyment of the nature walk.

PP: "Um, I quite enjoyed when we went on the nature walk um yeah and just looking at the river and looking at all the trees and looking at all the nature there is."

This statement suggests there is a case for including a wider remit to the study of place, one that goes beyond solely focusing on built-up areas. The case for a wider remit to the study of place was raised by Massey (2005b): "[D]oes place *become* place only place with human engagement?" (Massey, 2005b, p.356, italics in original). Here Massey (2005b) argued for a greater nonhuman recognition. To have a wider remit to the study of place would be one way of including Somerville et al.'s (2015) argument for including a posthuman approach. At the same time, it could be a way of encouraging young people to know and care for places in a different way, which was part of Somerville's (2010, Somerville et al., 2011) original call for an alternative place pedagogy.

These students have shown interest and concern for the nonhuman and the challenges they are facing, suggesting if present, they could motivate secondary geography students to engage with issues facing the places they study.

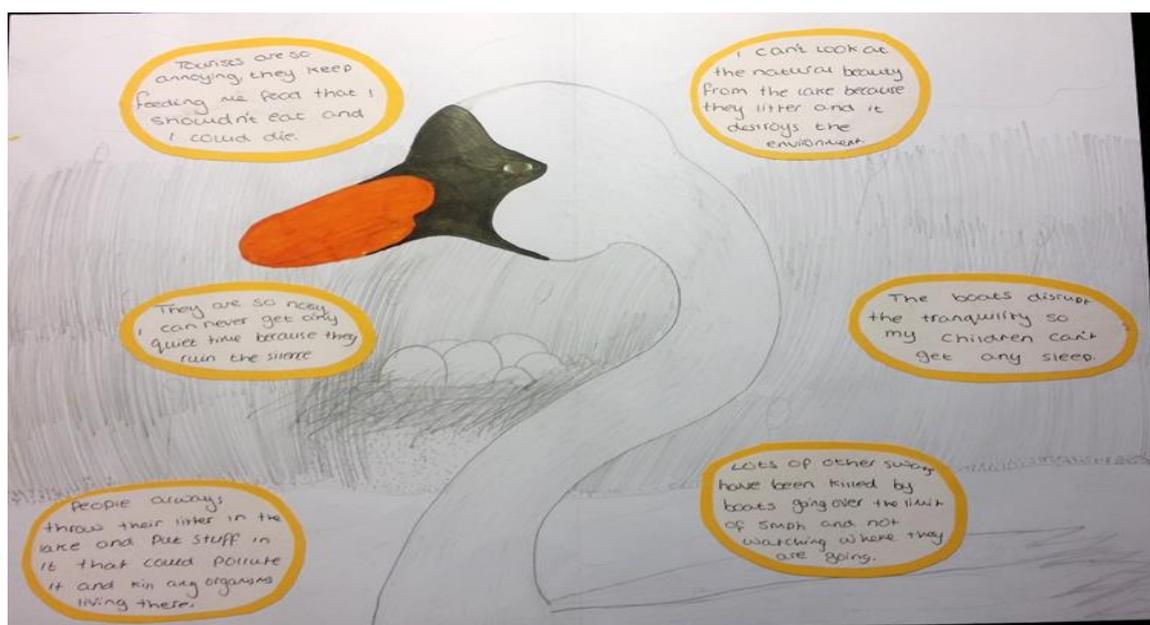


Image 55. A swan's thoughts

Captions clockwise

I can't look at the natural beauty from the lake because they litter and it destroys the environment.

The boats disrupt the tranquillity, so my children can't get any sleep.

Lots of other swans have been killed by boats going over the limit of 5mph and not watching where they are going.

People always throw their litter in the lake and put stuff in it that could pollute it and kill any organisms living there.

They are so noisy. I can never get any quiet time because they ruin the silence.

Tourists are so annoying they are feeding me food that I shouldn't eat and I could die.

The other members of Group 2 supported PH in demonstrating a different relationship with a place, through their embodied sensory experience. In Image 55 the presentation complements that of their fellow group member and together they provided a different way of telling a place story, one that is sympathetic to the nonhuman. Here the students have absorbed their place experiences and in the process have started to see the world differently (Somerville, 2008) and created their own swan place story, one that incorporated the nonhuman perspective. In the process these students have formed a different place epistemology. This is reflected in Somerville's (2008) call for a different means of representation, which is partly answered by her broad interpretation of place stories (Somerville, 2010). These presentations demonstrate the students' interpretation of the place and the aspects that have captured their interest. It could be argued that having the freedom to explore has allowed the students to be able to connect with the place in a different way, one that has recognised and identified with the nonhuman presence. This connection appears to have stimulated the students to extend their ability to think relationally and creatively. In the process they have shared their geographical story about issues facing the swan.

The students' presentations have been supported through their use of multimodal ways of creating meaning to enhance their messages. This is evident through the way in which they have used design in Image 55 with the captions being mounted on yellow card to increase the impact of the written captions. The students have used colour to affect in the saturated orange of the swan's beak contrasting with the monochrome of the rest of

the swan's body. The positioning of the swan next to a sketch that included its nest and surrounding sedge grass further contextualised the threats the swan is facing.

7.5 Recording place knowledge through writing a postcard

After the students completed their individual place representations and group presentation, they wrote postcards about their reflective embodied place experiences. The genre of post card writing with the use of an accompanying photograph, encouraged the students to write imaginatively. Being able to use their geographical imagination was an activity which Rawling (2017) noted was absent from the current traditional geography KS3 curriculum. At the same time this style of writing could provide a way for students to engage and relate to being in place in a different way. The wider benefits of such an approach were explained by Rawling in her discussion about what she felt was lacking in school geography in its study of the natural environment: “[W]hat it has not done is to make young people reflect on the way their lives are intertwined with that of the places and landscapes they inhabit, to introduce them to the more subjective and personal responses of others, or as Jonathan Bate asserts, to remind them at this crucial moment in earth history, of their own power to make the earth ‘sing or be silent’” (Rawling, 2011, p.66).

The opportunity to write in a postcard genre could spark a different approach to how the students express themselves and relate to a place. It is not often they are given a chance to say what they feel about a place in a geography lesson and this element of affect is not evident in the current KS3 geography programmes of study. Consequently, this section examines three different postcard extracts where the students had more freedom to provide their views of their place experiences. It is an opportunity to see how the students perceived the place and what aspects of it they felt they wished to share from being in the place.

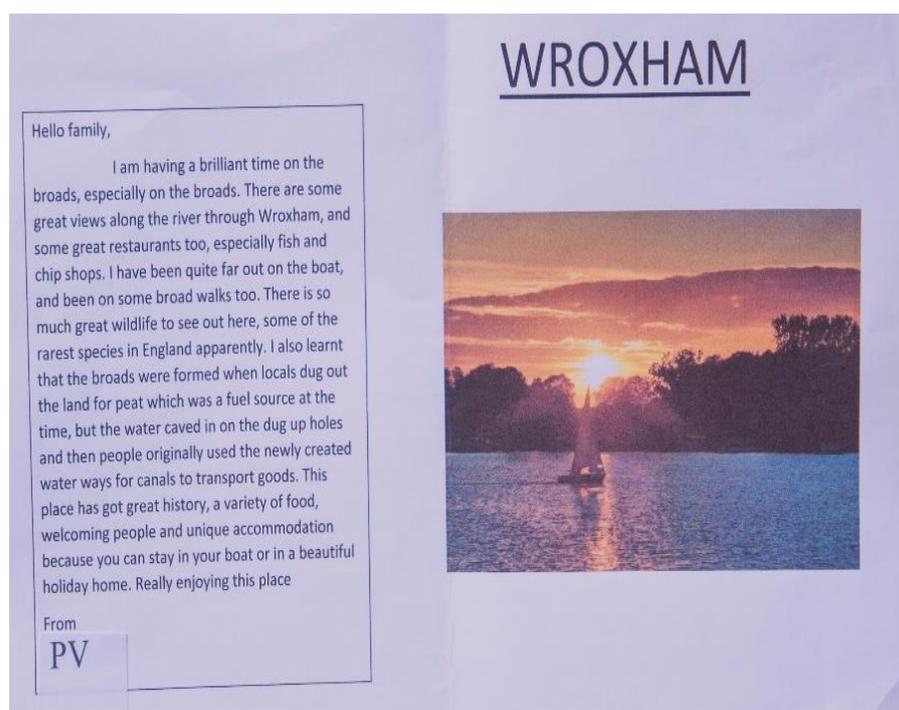


Image 56. PV's postcard

Hello family,

I am having a brilliant time on the broads, especially on the boats. There are some great views along the river through Wroxham, and some great restaurants too, especially fish and chip shops. I have been quite far out on the boat and been on some board walks too. There is so much great wildlife to see out here, some of the rarest species in England apparently. I also learnt that the broads were formed when locals dug out the land for peat which was a fuel source at the time, but the water carved in on the dug up holes and then people originally used the newly created water ways for canals to transport goods. This place has got great history, a variety of food, welcoming people and unique accommodation, because you can stay in your boat in a beautiful holiday home. Really enjoying this place.

From PV

PV has shared his sensory place insights through his reference to his sense of sight, taste and kinetic senses. The postcard is written in an informative chatty manner and yet at the same time PV has managed to convey a sense of place, giving an insider's perspective. This is evident in his reference to the fish and chips shops and the possibility of hiring a boat as a holiday home. In his narrative PV seems to have created an informative yet informal postcard genre style of communication. This is evident in PV's postcard which has managed to negotiate the here and now of the place while at the same time contextualising the information about its history. In the process PV has shared what is

significant for him about the place and contextualised his place knowledge. Within this textural communication there are layers of information about the place's environment, ecology, culture, history, communications, economy especially which provided detailed insights into the nature of the evolution of this unique place. This is reflective of Massey's (2005a) negotiation and interpretation of place knowledge: "[R]ather, what is special about place is precisely that throwntogetherness, the unavoidable challenge of negotiating a here-and-now (itself drawing on a history and a geography of thens and theres); and a negotiation which must take place within and between both human and nonhuman" (Massey, 2005a, p.140). The student recognised the importance of the nonhuman through his knowledge of the presence of rare species within the Broads. This information was available to the students through websites they could explore and was mentioned by the tour guide and wildlife warden. In this instance PV chose the photograph image himself which is reflective of a calm tranquil place suggesting this was the image of the place he wished to share with his family. In the process the student has managed to convey an essence of being in place through his feelings for his surroundings. The next postcard, Image 57 from PB is written in a similar chatty manner that will be referred in this research as an example of a postcard genre.

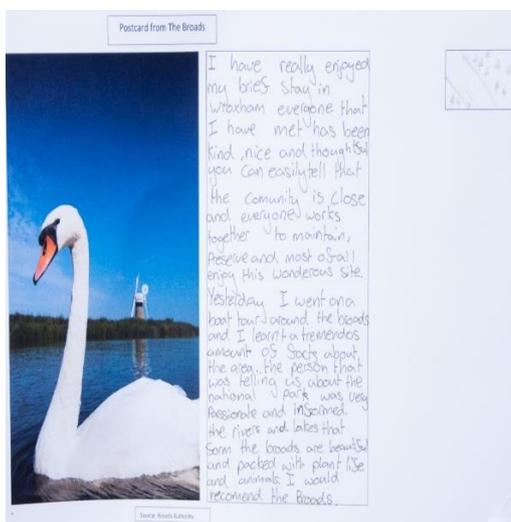


Image 57. PB's postcard

I have really enjoyed my brief stay in Wroxham everyone that I have met has been kind, nice and thoughtful you can easily tell that the community is close and everyone works together to maintain, preserve and most of all enjoy this wonderful site.

Yesterday I went on a boat tour around the broads and I learnt a tremendous amount of facts about the area. the person that was telling us about the national park was very passionate and informed. the rivers and lakes that form the broads are beautiful and packed with plant life and animals. I would recommend the Broads.

The tone of the text is informative and yet leaves the reader with a warm feeling about the local community and the student's experience of being in the place. The student has

managed to convey an insightful yet positive message about the unique nature and culture of the place. The student has personally connected with the place.

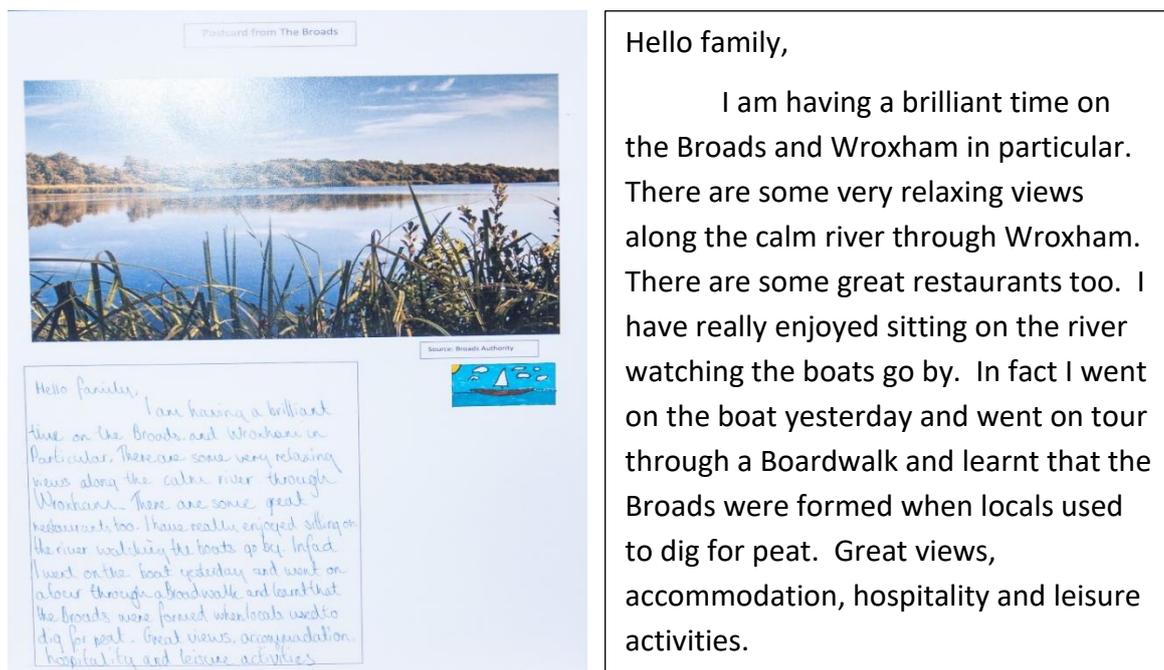


Image 58. Postcard 3

In Image 58, the student has followed the previous postcard entries in sharing an insight into the local culture with the reader. This unique culture is recognised through the way in which the locals used to dig for peat. The genre allowed the students to incorporate their own impressions of their experiences. Here the student has suggested a slow pace of life with good tourist facilities in terms of places to eat and stay. The unique sense of place unfolds through the ability to watch boats passing, an allusion to movement. The message is of an evolving culture. The inclusion of a contextually designed stamp creates a visually affective message which signals the extent of the waterways. The students have managed to imaginatively express their feelings about being in the place, an aspect of environmental geography that Rawling (2017) felt was not promoted in the current geography KS3 national curriculum. These students have demonstrated Rawling's (2011) recognition of how supporting students to express themselves more subjectively could help them to connect with a place which made her recommend this area of geography is given further exploration.

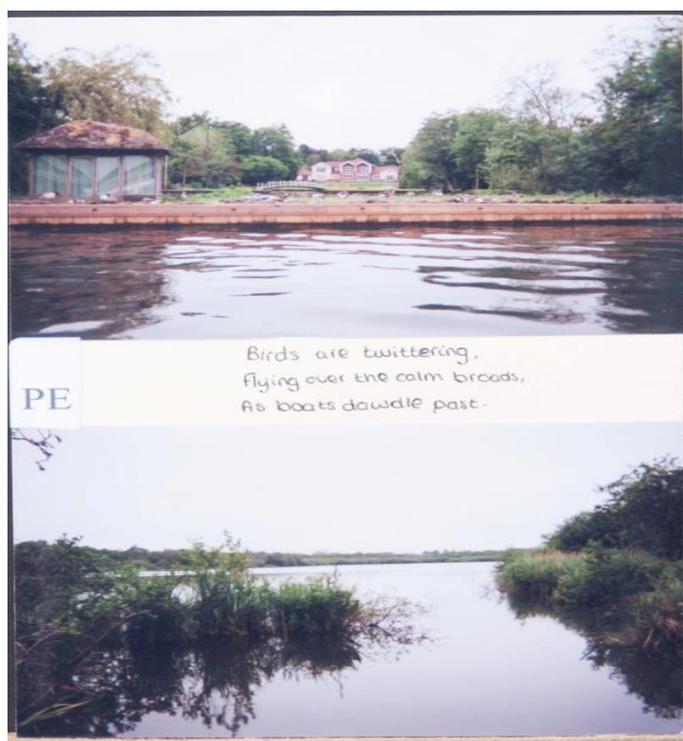
7.6 Geographical place poetry

The students wrote poems to reflect their embodied place experiences. Some of these were composed in the field where the students were surrounded by a wealth of sensory

stimuli. The majority were written later when the students had time to reflect over their findings and reactions to being in the place. The poems took a variety of formats which included the broad concept of writing a haiku while others were acronyms mainly related to the local place names. The poems were represented in a multimodal format accompanied by images or frames. Through their poems, the students managed to create a sense of place. This has led to an examination of a selection of the students' poetry informed by Andrews' (2018) work which signposts links between poetry and multimodality.

The guiding framework for analysing the poems has encompassed the trilogy of the composer having had an embodied sensory experience with the poem being represented in a multimodal format to enhance the message which is thirdly interpreted through a geographical and multimodal lens. The framework has taken Andrews' (2018) poetic framework of composer, multimodal composition and audience and applied it to a geographical situation. This situation has encompassed Somerville's (2010) approach of supporting the students to have an embodied place experience where they collected sensory data which included photographs. These students composed their place related poems through a geographical lens which influenced the content of their narratives. Some of the acronyms were integrated within the students' posters while others were represented on separate sheets. They tended to be integrated with visual images which contextualised and complemented the words. These multimodal poems will be examined for their ability to create geographical knowledge and a sense of place. Added to this Andrews (2018) argued poetics is associated with movement. This would address Massey's (2005a) reticence to represent information because it fixes time and space. Consequently, this analysis will consider how the students navigated their way around time and space in their representation of a place.

The following poems followed the tradition of representing poems with images (Andrews, 2018) in this instance photographs. The first poem is arranged between two photographs which contextualise the content and adds affect.



“Birds are twittering,
Flying over the calm broads,
As boats dawdle past.” (PE)

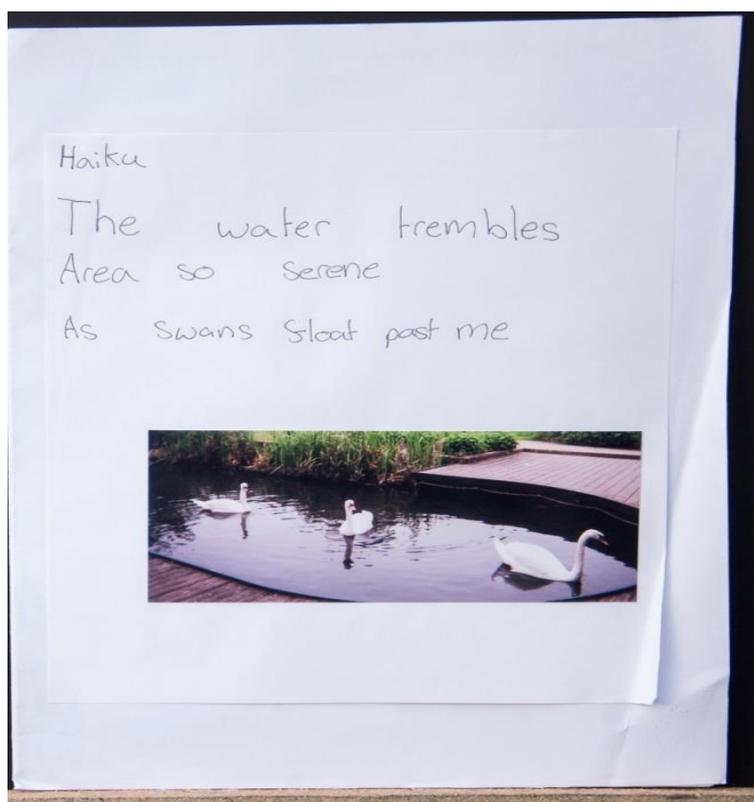
Image 59. PE’s poem

The reader’s eye is drawn to the visual images in Image 59 which start to build up an internal visual impression of the place. The student took the images herself which demonstrates the incremental reflective process involved in creating the poem. On reading PE’s poem, she introduced sound to the landscape through her reference to the birds twittering. The poem demonstrated PE’s interest in sound which was apparent from her part in the group who took recordings of bird song. The text draws on the student’s reflections about the place from her day’s fieldwork. The image of the place enhanced PE’s poem through her careful choice of words. This is especially evident as the two images do not include any flying birds or moving boats. This is a recognised trait in poetics:

[P]oetry, among its many characteristics, arises from intensity. That intensity is not always intensity of feeling; it can also be intensity of looking, of hearing, of sensing some framed experience, of thought, of memory – or a combination of any or all of these. It almost always calls on the senses and is sometimes physically driven. Its close association with rhythm is an expression of this intense presence. Most poetry, too is grounded in the material world. (Andrews, 2018, p. 17-18).

It is the characteristics of poetics that Andrews has identified here, namely the use of carefully chosen words, the inclusion of sensory insights and its grounded nature in the real world, that are apparent in the students' poetry in this research.

Andrews' (2018) interpretation of poetics' use of the senses to create a grounded message about the real world is evident in PE's poem. The mention of bird flight and dawdling boats conjures up a living landscape which is moving at a slow pace. This sense of serenity is increased by the visual images of calm water and the careful use of the description "calm broads". The notion of birds 'twittering' creates an aural sense of light melodious sounds. The student in this instance has used a range of senses to convey her sense of place. These have included the reference to sound, the visual sense provided by the photographs and text and the content referring to the kinetic sense of movement. All occurring in a gentle manner. Throughout her poem PE has conveyed a calm sense of her experience of being in the place.



The water trembles
Area so serene
As swans float past me.
(PA and PB)

Image 60. Group 7's haiku

The poem in Image 60 was written by members of Group 7, similarly to PE's poem, it shares a sense of movement supported by a visual image. The photograph of the swans was taken by the students who had identified with them during their fieldwork visit. In Image 60 they are appearing to glide across the trembling water which reinforces the

serene atmosphere that the carefully chosen words conjure up. The suggestion of a sense of calm has permeated both poems. This has been achieved through layers of referencing whether through the visual imagery of the photographs, the choice of words or sound when the poems are read aloud. In both instances the poems have created multiple layers of meaning as Andrews (2018) implied could occur through their multi modal composition.

The following acronyms were mainly created around local place names. The following selection include two poems about Wroxham and The Broads and one about Hoveton to compare their individual nature. However, some students were motivated to create their own poems, inspired by the characteristics of the place they were studying. These included acronyms for a swan and tourists.

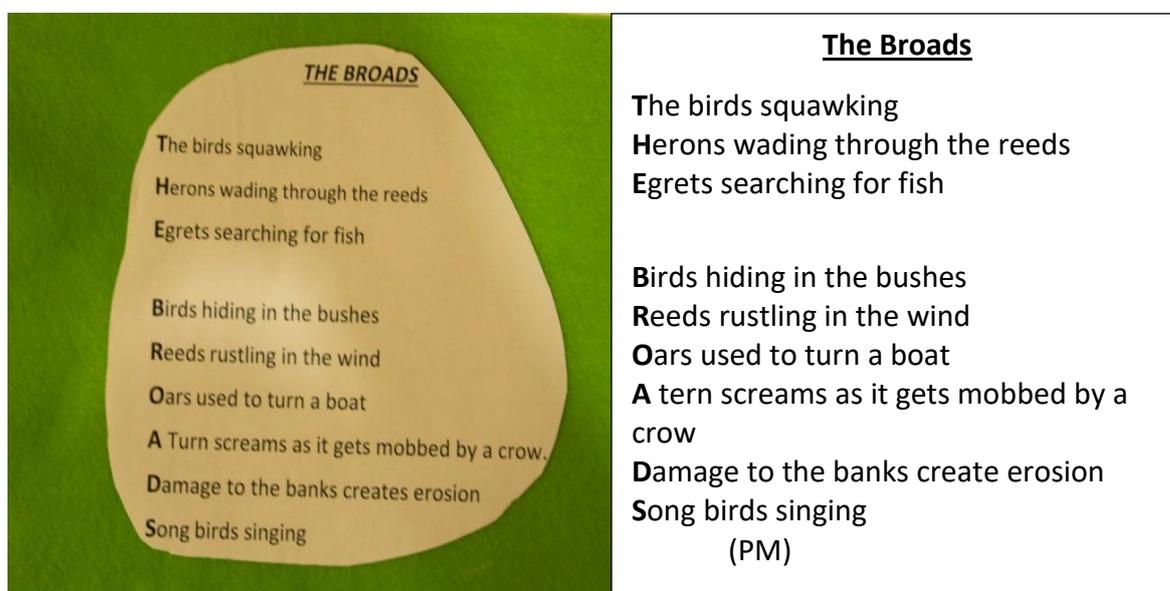


Image 61. Acronym of The Broads

In the acronym of The Broads in Image 61, PM has displayed his interest in wildlife and the environment which permeates the whole poem. The mounting of the poem on a green felt background acts as a metaphor for nature. It was written by a student who had a keen interest in photography and was witnessed crouching in the undergrowth to inform his sense of place. The student's interest in nature is evident from the poem's subject matter which includes mention of local birds like the tern, egrets and heron. Throughout there is mention of movement in a living landscape. The reference to "rustling" reeds further contextualises the content and sense of movement. This is also apparent in the bird sounds who are squawking, screaming, singing or are wading, hiding,

searching or being mobbed. These descriptions help to create an image of an active moving place. There is a sense of rhyming through the alliteration of 'turn' and 'tern' on adjoining lines. Rhythm is achieved through the repetitive use of gerunds in the first three lines. Rhyming and rhythm work to create movement within the words of the poem. The poem conjures up an image of an area rich in wildlife. Throughout there have been sensory references which have been visual, aural, kinetic and textural. However, there is a geographical message to this thriving natural environment through reference to the banks suffering from erosion. The detailed information about wildlife suggests the student has spent time reading the background reference material.

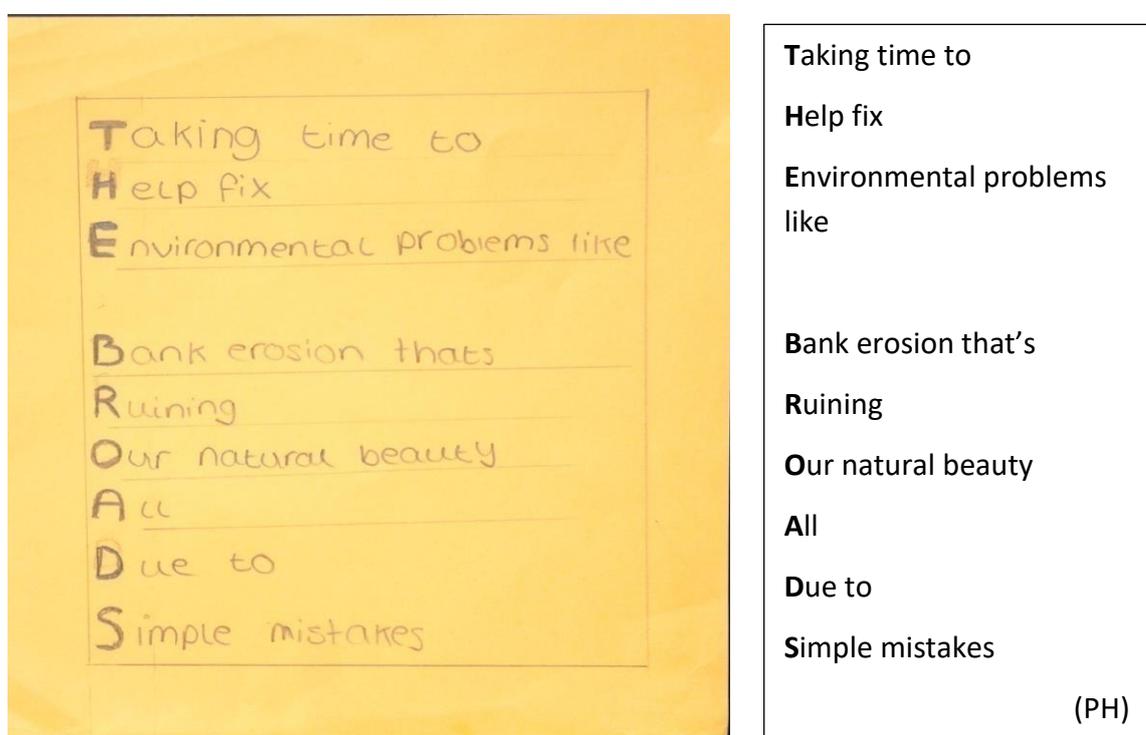
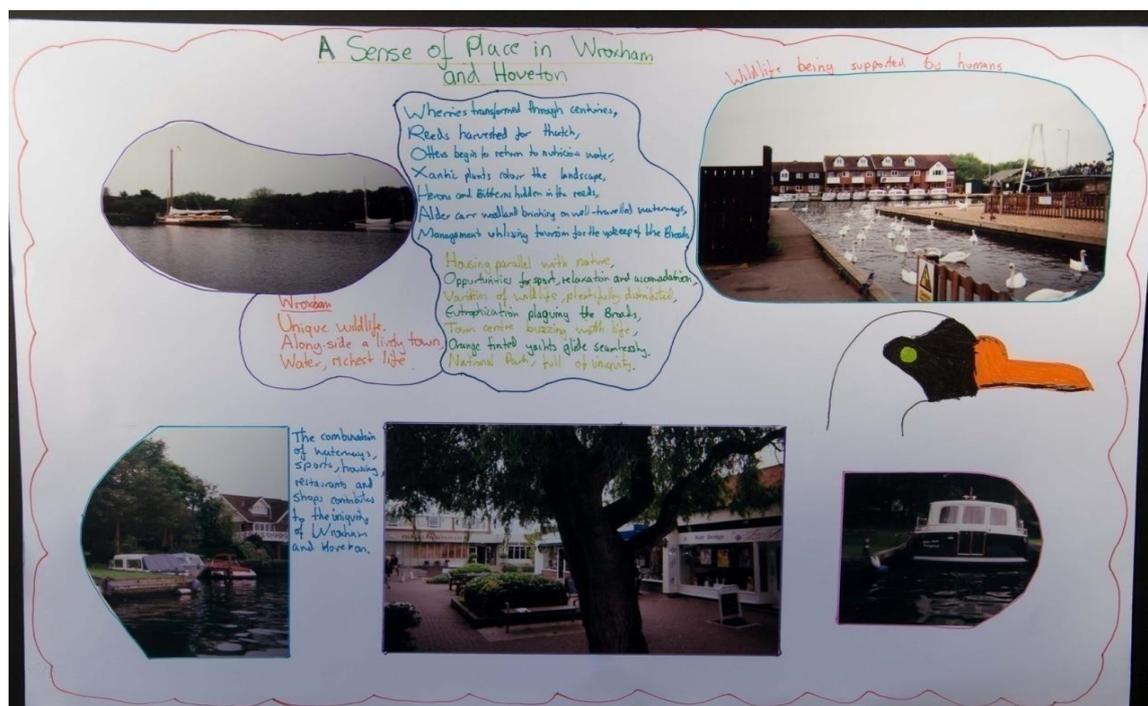


Image 62. The Broads acronym

The acronym in Image 62 for The Broads has been included because of its different message from the previous one although they both share an environmental theme with concern about bank erosion. The student who composed this acronym was part of the group who became interested in the plight of the swans. This interest has extended to the acronym. The subject content identifies an environmental issue and has an ethical theme in its reference to mistakes that have been made. However, the tone of the message suggests the situation is not beyond repair and if changes are made the situation could be improved. The implied message is that it will require humans to adopt a change in behaviour. This reflects Kress's (2010, p.61) comment that it is difficult to escape

'positioning' in this instance in relation to ethical. The tone and content of the acronym suggests PH has thought about the situation.



Wherries transformed through centuries,
Reeds harvested for thatch,
Otters begin to return to nutritious water,
Xantic plants colour the landscape,
Heron and bitterns hidden in the reeds,
Alder carr woodland bringing on well travelled waterways,
Management utilising tourism for the upkeep of the Broads.

Housing parallel with nature,
Opportunities for sport, relaxation and accommodation,
Varieties of wildlife, plentifully distributed,
Eutrophication plaguing the Broads,
Town centre buzzing with life,
Orange tinted yachts glide seamlessly,
National Park, full of iniquity.

(PS, 2016)

Image 63. PS's poster including place acronyms.

The central position given to the acronyms on PS's poster implied he wished to share his original work and provides "informational weight" (Kress, 2010, p.60) to the acronyms.

Their significance is increased through use of colour and a frame. They are further

contextualised by surrounding photographs and a hand drawn head of a swan. The presence of the swan suggests the student is interested in nature. This interest is carried through into his acronyms of Wroxham and Hoveton where there are references to the local flora and fauna. The student has used the genre to create a geographical narrative about the place. The process of writing the acronym has required the student to carefully choose his words to communicate an informed place narrative.

The geographical content is knowledgeable and at the same time has managed to negotiate time and space in such a way that the reader is left with an impression that the place is continuing to evolve. The first line implies an awareness of how wherries have had to evolve to meet changes in communication “[W]herries transformed through centuries”. While the reader is further introduced to the unique place with a clear impression of nature being managed in a positive way that has led to the re-appearance of otters. The student has painted a picture of heron and bittern hidden in the undergrowth, which conjures up a vivid image of the omnipresence of nature. It is a realistic account in terms of explaining how environmental management projects are being funded through tourist income.

The following acronym of Hoveton continued to refer to a place rich in wildlife. Nevertheless, a realistic picture is created, one that has acknowledged the area is suffering from eutrophication. The careful choice of the word “plaguing” suggests it really is a difficult problem to effectively manage. The adjective “buzzing” acts as a metaphor for a lively town centre. This acronym includes more references to the unique culture of the Broads with yachts. The course of the river and Broads has influenced the layout of the housing which is linear or to use PS’s description “parallel with nature”. The anomaly is the word “iniquity” which means wickedness, or I am wondering whether it is the student’s own interpretation of unique, to fit in with the poem. In which case if the word “uniquity” existed, it would capture the idiosyncratic nature of the Broads.

The student has identified and negotiated a variety of trajectories in the landscape, not all progressing at the same pace. There are similarities with Massey’s (2005a) description of the Lake District. The mention of the wherries demonstrated the area is steeped in history. In his recognition of eutrophication, PS has acknowledged it to be an on-going problem that requires more attention. The students learnt about the effects of farming on water quality during their boat tour. Nevertheless, there has been enough

improvement in the water quality to allow otters to return. Each activity follows its own trajectory. There is a suggestion that the resources are being managed responsibly with the reeds harvested for thatching and alder carr woodland stabilising the river banks to allow river transport. The student indicated tourism is being managed to produce an income to support environmental improvements. Taken together the acronyms have captured the essence of the Broads through the inclusion of place knowledge about its unique history and rich biodiversity which is being carefully managed to ensure a sustainable landscape.

The students in writing their haikus and acronyms have done so in a realistic concise way, reminiscent of their findings from their day's fieldwork. The content of the poems has not shied away from tackling issues like bank erosion and eutrophication. The poems have included layers of information about the place from bird life, vegetation, flora, fauna, rivers, water quality to people living and moving around. In so doing the students have managed to capture the unique nature of the place. At the same time, poetics have supported the students to express their embodied place experiences and provided a structure for the students to integrate their place knowledge with their sensory insights. These messages have been enhanced through producing multimodal representations which have inter alia included photographs. In so doing the students have recorded their own place stories synonymous with Somerville's (2010) alternative place pedagogy.

7.7 A different place story

After participating in a diverse range of learning experiences that encouraged the students to get to know a place in a different way, they started to critically engage with their surroundings. They had got to know the place through their whole body and used their senses to connect with their surroundings. This meant they had listened to hear, looked to see and used their kinetic sense to explore the place. Through these experiences the students began to engage with all aspects of their place of study, human, nonhuman and developed a growing attachment to nature. At the same time, they were fascinated with the place's history and culture. Their negotiation of these ideas had taken shape during the diverse and creative ways in which they had represented their findings. All of this was unknown at the outset of the research. Added to this the students have grown in confidence and were willing to express their own views when interviewed. Another unforeseen outcome was the students starting to suggest how the place could be

managed differently. This section brings together their nascent ideas to suggest a different place story.

On reflection this should not have been an unforeseen occurrence especially as from the outset Somerville (2010) whose ideas have guided this research, was searching for an alternative place education, one that would create a different answer as to how to engage with local places. The aim of this section is to navigate a reflective path through the interview data and to go beyond creating too general a picture while accepting the interpretation depends upon the lens being applied to the data (Rose, 1997).

Consequently, the interpretation cannot be construed as being universal (Rose, 1997).

At the beginning of the semi-structured interviews it was uncertain to what extent the students would discuss their ideas. By this point in the research the students had explored the areas of the place that interested them and started to develop a mental picture of how their own research fitted into the overall configuration of the place. Noticeably those students who had spent time reading relevant websites and research material had developed a good understanding of the processes at work. For those that had not done so, the expert information from the tour guide and the Nature Reserve warden provided insightful local knowledge to contextualise their own findings.

One of the themes that emerged from analysing the interviews related to care of the place. All the students had walked around and experienced the place so were able to contextualise their comments about the features they had observed. The following impressions are embryonic and in some cases individual within their groups but do show the students are starting to think for themselves and come up with solutions to issues they recognised.

The first group's transcript, Group 1 identified separate issues and ways of dealing with them.

Researcher: Now were there any parts of the work you particularly enjoyed or any parts that you felt that could be improved if it was done again?

PS: I think Wroxham could improve on the litter because I found a number of areas where I found wrappers, so I think they could either um have like a no litter area or hire people to go around and pick up people's litter and put it in bins.

Interestingly litter was a recurring theme across all the groups. In walking around the student had been able to have an overview of the area and identify issues that he felt it

was facing. Litter was the first issue that PS mentioned and voluntarily proposed solutions to manage the problem. Litter was similarly recognised by PP in Group 8 who thought there could be more bins.

The discussion about the place's sustainable management was continued in Group 1 by fellow member PT who identified a different problem and way of tackling the issue:

PT: I think it's quite sustainable, it's like almost there but I almost think a bit more education, educating people about how they are damaging it without knowing it like with the speeding boats that many people don't realise that's what is happening that they are wearing away the banks but I think if we managed to like make more people know about that they might be more sustainable in the future.

Here PT identified the issue of bank erosion that was raised by the tour guide. The students had observed the problem at first hand from the cruise boat. Interestingly PT felt it would be best managed by education. This is a remedial solution that PT considered could be successful. He felt the issue could be overcome through sharing knowledge about the effects of poor practice and appealing to the public's better nature.

Besides observing what was going on around them, the students in Group 1 talked to people to gather further information and listened to what they were told. This was evident in the following responses where PU directly responded to his fellow group, member PV:

Researcher: And when you asked people, the tourists, what did they give as their reason for coming there and what did they feel _"

PV: Urh, well they were all tourists, there was only one out of those I asked of the 5 and um they came mainly to relax and those had been before said that they're friendly people that they've worked together to try and help the idea of the Broads, they try to make them cleaner such as helping wildlife as well.

PU: I think it was really interesting, it was actually made by humans like a thousand years ago and the fact that they're still keeping it up-to-date for today's living. Also they're going to try and dredge the rivers or whatever you call it, to try and get all the mud out so it will last longer and that both silt will keep going through otherwise it will build up and by keeping it stable and use most of their profit so by keeping it stable it is a pretty big economic factor as well.

Firstly, PV used evidence from listening to the tourists who did feel the local people were actively trying to improve the water quality and caring for wildlife. While PU recognised the on-going environmental management that is required in terms of dredging to ensure the Broads have a sustainable future. Interestingly all three comments from Group 1 have

been considered and in the process the students have realised the need for on-going environmental management. Interestingly PU used geography's vocabulary and grammar to support his explanation. In his articulation of dredging he demonstrated his growing understanding and application of the concept, part of the subject's grammar (Lambert, 2011). In this narrative both students clearly viewed environmental management as an on-going process. In PU's case he linked human and physical geography in his appreciation of the need to dredge the river to sustain the economy, which needed to be buoyant to pay for the ecological management. His explanation has displayed relational thinking.

The students when discussing their study of place, demonstrated concern for all its inhabitants, human and non-human. In PA's case the realisation of the need for active management was based on his experiential place knowledge.

Researcher: Has your study of the places, your group in particular because your group were looking at litter and you were very clued up on the environment, has that influenced your view of the environment?

PA: Oh yeah, yeah. I would say that if I came here beforehand, I would have said everything is fine you know, there are swans, there are ducks. The banks are filled with wildlife. There's plants growing, there's lilies in the water, but when you actually learn about it you realise that it is still recovering from a time when the Broads wasn't maintained, and I wouldn't have guessed at in a million years but you see like the lilies, they're actually there because the thing is shallow. The water is shallow, when it should have been much deeper because all the chemicals and stuff that were used in the water and for example the wildlife on the edges is there because the reeds have died down and it is like spread and peat and stuff. It is really changing rapidly and I wouldn't have guessed I really wouldn't have understood that it's broken down before they started repairing it and I just think that the fact that we have just done this research especially with our litter we understood how important the Broads is and how much it **needs** (bold font represents emphasis in PA's intonation) to be repaired because it is such a wonderful place to go and I couldn't have imagined er this place without it or something I think we would really be missing out on some of our heritage almost.

PB: It does make people more aware of what has happened and what can happen.

PA: The wildlife can be affected; the nature of the place can really be affected by what we do and I think that we really need to be careful in a place like this and make sure that we encourage wildlife to spread and I think we should do whatever we can to do this.

In this discussion amongst themselves the students were able to express their own views about the significance of the Broads, especially its ecology. They were evidently proud of

the active part they had played in carrying out their own research into litter, which gave them a sense of involvement and achievement. Their comments gave an understanding of the need for actively managing the Broads which they realised were continually evolving. Their view of place was not of a static place. In this respect their views were sympathetic to Massey's (2005a) view of place and they had captured it at one point in time but after their visit realised it would continue to evolve. They had appreciated and negotiated time and space in the event of place.

In both groups' discussion the students appreciated the temporal nature of their place study and perceived it provided a snapshot of the place, during its continuing evolution. They are embracing Massey's (2005a) definition: "[P]laces not as points or areas on maps, but as integrations of space and time; as *spatio-temporal events*." (Massey, 2005a, p.130, italic in the original). Their responses are open and appear to realise their study is part of a living place that is a 'spatio-temporal' (Massey, 2005a, p.130) event within a longer history that extends to a geologic past.

Members of Group 8 noticed different features that needed improving while they were walking around.

Researcher: "Now do you feel because of this that you have (PO's place poster has pictures of abandoned supermarket trolleys) how you view the trolleys?"

PO: "The trolleys were everywhere so it was something I noticed because if you were walking around just all these trolleys at Roys there were these random trolleys where people had left them, and it was maybe a kind of negative thing necessarily but it was cluttered the place and made it not as clean."

Researcher: "How could they use, what else could they use to move things around? Have you got any suggestions?"

PO: They could use trolleys, but people have to go around and put them back where they should go in the village so.

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PP: When we were there, I didn't see many bins around which is why I think without a bin like throwing things on the floor. I didn't see many, so I would put more bins around.

Researcher: PO, any suggestions of how to improve the environment and to make tourism more sustainable?

PO: Maybe eco-friendly boats and maybe update things because there are a lot of old tired looking things in the town, so if you updated it maybe it would be friendly to the environment.

Similar problems seem to be emerging from the students' observations from walking around. Litter appears to be an on-going problem. These comments emerged as the students had experienced a certain level of autonomy to go and explore the place in their groups. The different groups all followed their own interests and investigations and in so doing became familiar with the central area and key features of the place. The process of observing the place with a discerning eye to collect relevant data for their enquiries contributed to their becoming more critical of their surroundings. Many of the students' ideas were from an environmental perspective. Their geographical perspective should not come as a surprise as they had emerged from the fieldwork having experienced the place through walking around as increasingly more observant and curious geographers.

When the class teacher was asked about whether he felt there really was a difference in how the students had reacted to the place in this study compared with their usual approach of gathering data in the form of traffic, pedestrian, environmental and questionnaire format, he gave the following response.

Researcher: Thank you, it seemed to tie together really well and thank you for your time. Now to what extent do you feel the pupils have experienced place differently through taking part in the research or do you think they have experienced place differently?

Class Teacher: Um yes, yes I do because the students were able to basically go into Wroxham with open eyes or as opposed to kind of half closed if we were to do it traditionally as a school we would give them structure, we would give them guidelines, we would give them the booklet which would really focus on what they were looking for therefore kind of half closing their eyes to sort of the place as it were, so by giving them a much wider remit in terms of research I think we enabled the students to fully open their eyes to Wroxham um in a way we would not, we would never get from a traditional approach.

Here the class teacher used the metaphor "open their eyes" to explain the way in which the students in directing and shaping their research meant they needed to explore the place to discover relevant information to support their own enquiries. These comments confirm Widdowson's (2017) remarks that pre-ordained fieldwork on a scientific model takes little notice of students' experiential insights and in the process reduces their ability to think relationally or develop conceptual understanding. At the same time, he noted that it limited the students' ability to make connections between physical and human geography. This broader approach has encouraged these students to explore links between the two processes and develop their ability to think geographically. This was

demonstrated by PU's ability to link the need for tourist income to support the ecological management of the Broads. Lastly, they are starting to explore the place story and consider how it could be more sustainable if current environmental issues like bank erosion, litter and eutrophication are tackled. In the process they have realised the need for a buoyant tourist industry to fund these projects.

7.8 Summary

The students have used embodied place sensory insights from their fieldwork to build place stories. These have followed Somerville's (2010) broad interpretation of stories which have allowed the student to explore their developing place understanding through a range of ways of creating meaning. These have included an annotated visual presentation, a power point, a graphical presentation, postcard, sketches and poetry writing. The students have been supported in their meaning making through multimodality. This was particularly informed by the work of Kress (2010, 2014) in their multimodal informational representations and Andrews (2018) in the students' poetry in the form of haikus and acronyms. These signal a careful choice of words to convey their perceptions from their sensory embodied place experiences. The analysis has revealed the diversity of the representations and messages and in the process revealed the ability of the students to think relationally and creatively.

The students used geography's "vocabulary" which forms the subject's "core knowledge" and its concepts which provide geography's "grammar" (Lambert, 2011, 2017, p.21) to support their developing geographical understanding of place. In addition, they used geography's spatial and temporal dimensions to provide stories of an evolutionary rather than a static place. In the processes the students revealed their ability to negotiate time and space (Massey, 2005a). Each story was clearly geographical with its use of maps, graphical representations and started to develop links between physical and human processes at work in their study of a place. The students have started to consider what might or could happen to the place to ensure it has a more sustainable future.

Chapter 8

Discussion and Conclusion

8.1 Introduction

The overarching aim of this research was to explore an alternative way of teaching and learning about place in Key Stage 3 Geography, one that would allow young people to come to know a place in a different way. The students were supported to develop investigations where they used their senses to connect and experientially engage with a place more deeply through walking and exploring. A focus of the investigation involved the students in shaping the direction of their study and starting to become more independent learners. The pedagogical work of Margaret Somerville provided the initial framework; her vision provided a different way of constructing knowledge about place. The basis for her pedagogical approach came from her work with Aboriginal and Torres Strait Islander communities where their culture informed an alternative way of being in place. Insights from her collaborative work with indigenous knowledge communities (Somerville, 1999, Somerville et al., 2009, Somerville and Perkins, 2010, Somerville et al., 2011, Somerville, 2013a) led to the creation of a postcolonial place pedagogy around the body, stories and the contact zone of different cultures translated in this context to exploring different issues. This research has adopted Somerville's (2010) ideology and drawing from it designed a place pedagogy that is compatible with secondary geography in a western curriculum.

The academic geographical understanding has been informed by the work of Doreen Massey (1994, 1999, 2005a, 2014) who was deeply critical of representing place as static. Instead Massey (2005a) sought to integrate time and space into the study of place, and in the process questioned how to capture a dynamic view of the changing face of a place when textual communication reduced the world to stasis. To create such an understanding required an appropriate means of representation, one that could encompass the spatial and temporal dimension (Massey, 2005a). Massey's (2005a) call for a new way to represent space as a dynamic entity and concept led to the incorporation of multimodality into this research. The introduction of multimodality has helped to increase the modal forms for making meaning and I therefore argue that the inclusion of multimodality should be an integral part of an alternative place pedagogy. It is compatible with Somerville's (2010) broad view of stories and storytelling, and at the same

time reflects Massey's (2005a) concern for reconceptualising space. Together, Massey and Somerville foregrounded nature and ecology, raising the profile of nature and the nonhuman perspective within the study of place. Both features are a fundamental part of this thesis.

The structure of this chapter includes an overview of the main findings in relation to pedagogy, representation and place knowledge together with any emerging additional outcomes. There is a discussion of the three research questions and contributions to academic thinking. There is reflective commentary of the limitations of the research. From the overall discussion there is consideration of how this research relates to previous research in the field together with contributions that it is making. This led into implications for key stage 3 geography and future research. Finally, there are concluding comments which contextualise the study within the rationale for the research.

8.2 Research questions:

8.2i How can pupils come to know a place in a different way through developing embodied sensory experiences?

The students in this research used their senses to explore and engage with a place in a different way to that traditionally enacted through classroom curriculum and practice. The focus on the whole body, having followed Somerville's (2010) approach, meant the students' experience of place was a holistic one, enabling them to walk to find out information and appreciate the aesthetics of the place. They had gone to study place as sensorially aware embodied beings rather than only being prepared to engage their minds with their surroundings. This allowed them to connect with the place in a different way. At the same time, the fieldwork encompassed physical and human geography through its study of physical, economic, social and political processes at work in the development of the place. The inclusion of an emphasis on the local ecology of the Broads increased this underrepresented area of geography (Massey, 2005a) and ensured the students moved away from modernity's single view of a place (Massey, 2005a).

Movement and senses featured prominently in this pedagogy. Their movements started with a guided boat tour in the morning where they moved across the water having features pointed out and explained. This trained the students to use their senses, especially their visual sense to be more observant. The students were fascinated to find

out about natural features, especially nonhuman and to see them in situ. They listened to the unfolding story about the evolution of the Broads. This introduced a temporal and spatial dimension to their place learning following Massey's (2005a) thinking and mentally adjusted to developing a palimpsest of information about the place. The layers of information included how earlier inhabitants had cut the land for peat and the later development of tourist industry based around the local environment. The students negotiated the changing values about how the environment is used and cared for. For example, they appreciated conflicting issues like eutrophication, inconsiderate tourists, bank erosion and misfeeding of wildlife. All of which were credible from observing changes in the landscape at first hand out the window of a boat aided by visually annotated diagrams.

During the afternoon the students spent time walking and exploring their study location in groups and decided for themselves where they were going to go and what they were going to record to build up information about the place. Their movements were restricted to a delimited area for health and safety reasons. However, some students commented that this restriction influenced their ability to obtain a true picture of litter across the whole settlement. They had started to take charge of their own research.

The students were given disposable cameras to record features that they thought were representative of the place, to subsequently create a sense of place. The process of deciding what they wished to visually record initially required the students to scan the landscape to decide what they considered to be representative of the place. This activity resulted in the students engaging in a dialogic relationship with the environment, its human and nonhuman, in deciding what they wished to record and become open to their surroundings elements. Taking photographs was also perceived to be a way of recording places of beauty like the Broads and it was used to capture moments when they engaged with the local wildlife.

In becoming familiar with the place, the students expressed indignation about dropped litter and other negative environmental features like graffiti, abandoned supermarket trolleys and eroded river banks which they photographed. Other popular features the students recorded included symbolic signs and they were drawn to iconic buildings including unusual architectural features which were unique to the place. The students set their own agendas about what they wanted to investigate. For example, one student

recorded the spatial differences in land uses between the town centre and the remote areas. The remote areas included the park and adjacent wooded path at the side of the car park. The students were observed crouching down to ensure they could focus on their object of vision to include as much detail as possible. On reflection they were collecting visual data to subsequently use to tell their place story.

Taking the photographs clearly appeared to confirm Somerville's (1999) prediction of connecting the photographer, the subject, with the object of their vision. One student mentioned how using a camera had enabled her to record what she saw which she would not have been able to explain while another student took close-up photographs so she could create a feel for the different textures and wildlife. The students themselves admitted to enjoying the activity and explained how having a camera had made them engage with their surroundings rather than walk past.

Through walking around the place, the students experienced a variety of haptic surfaces which included gravel, bare earth, grass and concrete paths, decking and tarmac road surfaces. There are similarities with Wylie's (2005) walking along the South West Coastal Path, where he likened walking over different surfaces to a haptic experience with nature. I argue that the kinaesthetic process of walking over any surfaces is a haptic one, with changing surfaces increasing the likelihood of raising awareness of the tactile experience. Interestingly when interviewed some of the students talked about the different locations in terms of their varying surfaces. For example, one student referred to textural surfaces like the flint wall in the old central part of the town and the natural areas in the park and along the water. At the same time, the students became geographers in developing their observational skills of recognising changes in their surroundings, a characteristic trait of a geographer (Driver, 2003). Through the process of moving around, the students used their senses to differentiate between the varying land uses and their spatial configurations.

While exploring the place, the students became aware of different sounds which varied between the more natural areas of woodland at the side of the park and the traffic in the town centre. Some groups chose to record these different sounds to provide aural evidence of the spatial variations. In the process, the students were building up an image of the sensory variations and associations around the place. In using their autonomy to decide what they wished to record, the students started to become more independent

learners in taking charge of their own investigations. The activity of walking was important to support the students to get to know the place and allowed them to be able to decide where they were going.

When interviewed, several students discussed the ways in which they had used their senses to get to know their study location. For example, listening was associated with hearing sounds connected with nature, traffic and being able to listen to people and find out information about the place, while another student mentioned searching out natural areas in order to listen to birdsong and during the process realised its importance. She was part of a group that recorded bird song in the vegetation along the path at the side of the park. Sight was associated with recognition of different land uses. One student remarked upon the different smells associated with the Broads and the roads. For another student visual pictures helped her to conjure up a mental image of the place while sounds were associated with developing feelings for a place. Through using their senses, the students started to develop a different relationship with their place of study and to engage with environmental issues. During the process the students applied their geographical lens to filter information when referring to features which are part of geography's vocabulary and concepts like place and tourism which are examples of geography's grammar (Lambert, 2011).

The students started to apply Gruenewald's (2003a) critical lens of identifying negative factors (deconstruction) and recognising positive factors at work (reinhabitation) within the place. This critical gaze was evident from a student who particularly noticed discarded supermarket trolleys which had been abandoned around the place while the same student (PO) suggested the rundown areas of the town could be updated and the environment improved through introducing eco-friendly boats. This enabled the students to critically interpret the area. The students became interested in different aspects of the place which motivated them to develop place stories. This is reflective of Somerville's (2010) use of stories for creating meaning about the happenings within a place. Their varied information gave the students the material to weave a story about the place. This may not be possible with a more traditional approach, for example where the students were given a set location from which to collect data in the form of traffic counts. In this sensory approach, all the students collected visual data to authenticate their investigation. This equally applied to the group of students who collected litter data and through having a camera strengthened their case about the issue because they had visual

evidence to validate their findings. The students who carried out the litter survey had chosen their data collection sites for themselves and could retell the whole process including their considered opinion about the feasibility of how the problem could be managed differently.

On reflection the process of getting to know the place through using their senses was an incremental one, especially in how the students became more observant, listened to different sounds in the environment and appreciated varying surfaces and spatial patterns of land uses. It gave them a body of knowledge from which they could build their place stories. Each student and group gathered their own data and started to appreciate the multifarious nature of the place (Massey, 2005a). They returned to the classroom prepared to tell a rich variety of place stories. However, to reach this point they had needed time to acclimatise to their new location and find their bearings, as recognised by Job (1999). This experiential time should not be underestimated; it was vital to allow the students to absorb their different surroundings and start to recognise for themselves, its unique features. During which the students had to make decisions for themselves, with one student noting she had to change her plan of only taking photographs of natural features when she noticed the different land uses in the town centre. It was an active learning experience and led the students to make deeper place connections while during the fieldwork they had developed a sense of responsibility towards the swans. This led several students to comment that in future they would take more care about what they would feed them.

The way in which the students gathered their data, using their senses, was representative of Somerville's (2010) alternative place pedagogy which is empirically based, primarily using qualitative information. It left PC feeling that walking around had given her a better sense of place. This was sanctioned by a fellow group member who considered it left her with an increased awareness of a sense of place. The pedagogic framework for supporting the students to know the place differently was based around Somerville's (2010) postcolonial place pedagogy of the body, stories with the zone of cultural contact in this context negotiating different place stories.

8.2ii Does the nature of how pupils represent their findings influence their connection to place?

In this instance, Kress's (2010) view of representation was used to interpret how the students portrayed their understanding and experience of a place. This particularly related to finding out about aspects of the place that had interested them and they had chosen to record. The way in which they communicated this information reflected Kress's (2010) belief that it supported their ability to share their information with others. During the process the students became active designers in deciding how they were going to shape their messages (Kress, 2010). In this instance the students were given suggested ways in which to represent and communicate their place findings. Each activity added to the previous experience, building incremental place knowledge. For example, the students were initially given their photographs to create a sense of place; to this was added the writing of reflective poems, postcards before producing a group presentation and if time, a model giving an overview of the place. Therefore, each activity cannot be viewed as a unique event but as part of a representation process, forming a palimpsest of experiences, building from their initial group planning and fieldwork to their representations.

How the students were able to represent their findings was influenced by the nature of the data they had collected. For example, the students recognised how photographs provided an aide-memoire and a means of re-connecting with their study location. They allowed them to reflect upon the place and as Rose (2016) noted to get a feel for the place and its wealth of sensory information. The use of artefacts to create a place story was recognised by Somerville (2010) in the multi-dimensional aspects of her storytelling which included the use of photographs, audio recordings, sketches, texts and maps. Reflecting upon this, some of the students thought ahead about how they were going to represent and communicate their findings to a wider audience. PC had taken a photograph of the place's sign to act as a title and brought her own camera to take panoramic shots because of their ability to convey a holistic impression and feel for a place while other students reliant upon disposable cameras created a panoramic effect by linking together a series of photographs.

Group 4 who made a video to create a sense of place and had initially expressed an interest in wildlife although their video gave an overview of the variety of land uses

present. Nevertheless, there was still a strong nature content. It could be argued that the students' interests influenced what they recorded and how they subsequently edited their material to create their place story. This was achieved through their use of close-up shots and lingering shots of wildlife, especially of swans in the park. However, at the outset they had decided to record the morning's river journey to provide water footage, followed by recording a varied footage of the built-up area to provide a representative video that displayed the sustainable relationship between the different land uses.

Through editing, the students managed to apply time-lapse footage to reduce a morning's river journey into a matter of seconds and in the process told their own place story which reflected their interest in wildlife.

Initially all the students were asked to represent their sense of place on plain A3 sheets of paper using photographs they had taken using individual disposable cameras. The open space of the blank A3 sheet meant design played a key part in the students' decisions about how they were going to share their place messages. Some students told mini stories through interrelated use of their photographs, sketches and annotations. The students created multimodal stories about their study location. Here design played the role Kress (2010) envisaged it could, in providing a supportive means of affectively communicating place messages. For example, the students used colour to affect with matching coloured lines and borders to separate and unite linked framed information as demonstrated by PQ in Image 18. This multimodal style of representation supported the students to share the way in which they experienced and interpreted their study location with their audience.

All the follow-up activities occurred with the students sitting in the same groups they had worked in during their day's fieldwork. Consequently, it became a shared social activity with emerging design themes which reflected their shared experiences. For example, adjacent groups started to stick river speed signs over the heads of waterfowl whose nests and lives would be negatively affected by speeding boats. The speed symbols were a metaphor (Kress, 2010) for the need to act responsibly and think of the nonhuman environment. This linked the information back to their study location and contextualised its unique location where there was potential friction between tourist water users and the local nonhuman population.

Most of the students' posters were multimodal as they incorporated images, contextual signs, symbols and photographic evidence of the land uses and landscapes they chose to record to support their place stories. The representation process encouraged the students to make intermodal links, for example through their use of linking lines with textural information, capitalization, colour, symbols and sketches to communicate their place stories. All these techniques helped the students to create their own sense of place. The diversity of these presentations directed me to multimodality to find the means of understanding and deciphering their messages. The students appreciated the freedom of being able to create their own message with one student remarking that creating a collage helped her to appreciate and represent the differences between the natural and built-up areas of the town.

The ecological messages had their roots in the talk by the tour guide and seeing the waterfowl captured their interest while walking around and exploring the place. The point at which the students conceptualised the design of their posters happened at various stages for the students. For example, some students had started planning how they would visually tell their place story when completing their detailed planning sheets, for others they remarked upon on the nature of the photographs they took while walking around, while others engaged with the activity back in the classroom. For these students their place representations had a strong aesthetic and affective message of their place experiences. This was apparent when one student found his photograph of a swan was developed with a red surround so he creatively used this as a metaphor for anger and included a cut out piece of litter, which as he remarked was found around where the swans gathered in the town. PU managed to convey his message through colour, proximity of images and the addition of three separate words adjacent to the images: "anger, home and litter". The representation was simply communicated and yet had a powerful message. On the same poster the student (PU) had included a cut out river speed symbol next to a picture of a motor boat with a simple textual message "trusting to go slow not to erode the banks" and the single word "trust" next to the motor boat. This was a thoughtful representation where the student had created a message that was relevant to their unique study location, supported by the tools of multimodality. In the process demonstrating a deeper place connection and awareness of the issues that it was facing.

The students used poetry's ability to capture a dynamic sense of movement (Andrews, 2018) which helped the students to contextualise their study. This dynamic use of language addressed Massey's (2005a) concern about the tendency of textual representation to reduce place to static representation. Writing poetry in the style of haikus and acronyms required the students to reflect upon their embodied sensory place experiences and carefully select appropriate vocabulary. The students chose features that captured their imagination, for example, one student chose to write an acronym about a swan and when questioned about the motivation for its creation he mentioned there were a lot of them. His fellow group member added that he felt they were iconic of the Broads. Another student who was observed taking photographs immersed in the vegetation, subsequently wrote a poem about the local birdlife. The creation of a place related acronym gave the students flexibility to write about aspects of the place that interested them. The presentations demonstrated an awareness of minute features of the place including links to the place's unique culture, history and ecology.

The students' messages were enhanced through colour, capitalization and framing. The writing of poetry with its careful choice of words supported the students' developing deeper sensory place connections. The opportunity to express their growing place familiarity was extended through the writing of a postcard which had an intended audience. This genre encouraged the students to select the features and experiences they felt would appeal to tourists. Other students wanted to share their fascination with the evolution of the Broads and the diversity of ways in which they could be explored by tourists.

The representation of the group investigations allowed the students to follow their interests which meant many chose methods they felt confident with, for example in creating a power point, artwork or a video. However, during the representation process, the messages they wished to represent stimulated the students to extend their abilities in their chosen field and increased the ways of showcasing their chosen messages, and their place cognition. One group's power point was contextualised with linked recordings of traffic and birdsong. During their representations the students started to negotiate how the place had changed over time through the inclusion of old photographs, textual comments and oral reflections of local people they had spoken to. Each representation extended their place knowledge and understanding.

When asked about their participation in the research, some students particularly commented on how they felt they had come to understand the area more through taking photographs and representing their findings. During their interviews some of the students started to express an interest in the place's future well-being. This took the form of expressions about the state of litter and the contribution of speeding boats to river bank erosion. They had witnessed these features at first hand and included them in their representations. Their representations included messages about how the area could be managed more sustainably for example through dredging. One student remarked how creating a collage made her realise the spatial differences between the natural and built-up areas. Their representations could not have happened without this experiential background to draw upon, demonstrating the significance of geography fieldwork.

8.2iii Is the concept of palimpsest a useful one in understanding a place?

The concept of a palimpsest informed by the work of Bailey (2007) has provided a different analytical lens with which to interpret happenings within a place. It gave an alternative way of examining spatial, temporal and cultural influences within a place without offering closure. The intermingling of superimposed layers of human and physical features offered a realistic way of understanding past happenings within a place. A palimpsest provided a way of thinking about place that integrates the past with the present while suggesting a place will continue to evolve. I argue in providing a route into the past through examining layers of events a palimpsest provided an insight into the complex nature of a place influenced by its unique history and geography.

The examination of a contextual history of objects which Bailey (2007) termed a palimpsest of meaning, provided a route into engaging with the study of a place with objects having their own trajectory. There are parallels here with the way in which Massey (2005a) viewed her study of the Lake District with its human and nonhuman phenomena having their own spatial and temporal trajectories. One example of Bailey's (2007) palimpsest of meaning in the Broads was the Norfolk wherries whose use has changed from cargo vessels to iconic tourist boats. The inclusion of examining objects addresses Massey's (2005a) criticism of palimpsests for their emphasis on textural evidence. The students in this research included information about changes in varied formats including the growth of Wroxham through old photographs. This pedagogic

approach supported the students varied interests and learning styles with fresh understanding occurring as Somerville (2010) recognised during representation.

In addition, the interrelationship of layers of human and physical factors became evident in the evolution of the Broads landscape. The area flooded from medieval peat diggings for fuel which was compounded with continued land sinking from isostatic readjustment at the end of the ice age together with rising sea levels. In relating the concept of a palimpsest to the study of a place there is scope for influences from phenomena beyond a place's boundaries which reiterated Massey's (1999, 2005a, 2014) argument for our interconnected world with the local in the global.

The concept of a palimpsest stimulated relational thinking through an appreciation of the interconnected nature of happenings within a place. Relational thinking has been identified by Jackson (2006) as a characteristic of thinking geographically to view the world, in this instance a place with its internal issues and links to the wider world.

From a pedagogic viewpoint understanding layers of information about Wroxham and the Broads stimulated the students to develop their geographical vocabulary and grammar (Lambert, 2011a, 2017). This was evident in their explanations of water issues including eutrophication, dredging, bank erosion and water quality. It involved an interrelated study of physical and human geographical processes evident in the ecological management of the water quality of the Broads which is under threat from farming and tourism. These are characteristic traits of geography's empathetic concern for the human and nonhuman environment (Lambert, 2011a). This information added depth to the students' contextual knowledge and conceptual place understanding.

Developing layers of knowledge supported the students' meta level thinking which was apparent in their study of the evolution of the tourist industry, from the coming of the railways, with the growth of boat building and the Roys retail empire all resulting from the waterscape created from medieval peat diggings. There was a realisation of the temporal development of Wroxham and the Broads and how it has been influenced by wider spatial influences through listening to local experts and carrying out research.

In suggesting the future is still undecided would answer Massey (2014) and Somerville's (2010) call for a need to take responsibility for actions within our local places which have consequences for our interconnected global place. There are insights into the future through Bailey's (2007) broad interpretation of a palimpsest depending of the context of

its use with the “durational present” (p.216) including a blurring of the timespan of the boundary between the past and present. Consequently, a geographical perspective of a durational present contextualises the study of a place and provides a link between the past, present and the future. The future Bailey (2007) believes has its origins in our current actions. From this perspective predictions could be made of how a place might evolve. The students suggested how the place could have a sustainable future through more public education about the need to care for wildlife or the need to adopt more responsible behaviour in adhering to speed limits on and off the water to make a positive difference. This information was shared through their interviews and presentations.

There are parallels with how Somerville (1999) used the analogy of palimpsest in her explanation of layers of happenings in the Australian outback. Each place story cumulatively added another layer of understanding with partial erasure of knowledge over time (Somerville, 1999). A re-working of the incremental layers of place understanding especially in relation to past land management could hold the key to providing a more sustainable future especially with the addition of current technology. The students listened to current ways in which the Broads are being managed by listening to a local wildlife warden to ensure they have a sustainable future.

Therefore, I argue using the metaphor of a palimpsest in the approach to learning through layers of activities, each building and interwoven with earlier insights supported the students in constructing their own place epistemology. There are similarities with Hammond et al.’s (2018) secondary geography work in their recognition of the value of the ‘Layers of London’ project in demonstrating how the layers of information can support students to develop their place understanding and knowledge of how the city has evolved. Comparably the students in this research through their layers of investigation in listening to local experts, researching secondary sources and in amassing their own primary data of human and nonhuman happenings have incrementally developed their place conceptualisation.

Therefore, I argue using a palimpsest in the approach to learning about a place in this research has ensured students became actively involved in constructing their knowledge. It has been achieved by engaging the students with layers of activities, each building on earlier insights about the human and nonhuman aspects of the place. The process led to the students starting to consider that our present actions have future consequences. This

was evident in their concern about the plight of the wildlife. In this research layers of sensory experiences and accumulation of knowledge about the evolution of the human and nonhuman aspects of a Wroxham and the Broads has enabled the students to develop their affective and cognitive conceptual understanding of place. Consequently, a broad interpretation of a palimpsest can support a dynamic engagement with the study of place.

8.3 Place knowledge as a palimpsest

The association of a palimpsest with the study of place is not a new one (Somerville, 1999, Massey, 2005a, Marvell et al., 2016, Hammond et al., 2018) and has a long association with archaeology (Bailey, 2007). Somerville (1999) in her *Body / Landscape Journals* introduced the concept of a palimpsest in relation to happenings in a landscape. She used the analogy of a palimpsest to describe the partial erasure of events that occurred in a landscape, such that there are still connections between each layer so contributing to the place's unique story (Somerville, 1999): "The first layer is the dancing places of Aboriginal women; it is Aboriginal women's mapping of place through story, song, dance, and site – linked by songlines to other sites across the landscape. The second layer is the superimposed one of white settlement at Pine Gap – road, fences, gates, gatehouse, and the symbolic white domes beyond" (Somerville, 1999, p.25). However, there was a moral undertone suggestive of Somerville's (1999) postcolonial contextual situation through the way in which she discussed the layer of "white settlement" over the "dancing places of Aboriginal women" (p.25). The work of Bailey (2007) opened the concept to wider applications, that included artefacts which extends the conceptual perception beyond written and oral accounts.

This study has embraced a palimpsest approach on various occasions through taking a broad view, one that extends the concept beyond the textural to be inclusive of tangible place features. This is synonymous with Massey's (2005a) view of place being in a constant state of evolution, yet at the same time it is still interrelated with its past. To appreciate how past happenings have contributed to the present configuration of a place is a revelation, with each place having undergone its own unique trajectory of events, human and nonhuman, which have contributed to its present manifestation (Massey, 2005a). To negotiate a place's unique story which is still incomplete requires as Massey (2005a) suggests, considerable negotiation.

The students' process of collecting data has been a layered activity. This is evident for each mode of data collection. However, this section examines the palimpsest of photography which captured the students' imagination and supported their increased place understanding. The first fundamental layer was through geography fieldwork allowing the students to walk and explore the place and apply their geographical lens to identify key features. The second layer followed the scanning of the landscape where the students selected and focused on their own identified point of interest. For many their attention was drawn to the unusual including symbolic and iconic features illustrative of the place and its geographical issues. When their attention was captured, they composed the picture. The third layer took place after reflection on the whole experience back in the classroom. Here the students interpreted their photographs and decided which ones to select for inclusion in their representations. The process is supportive of Rose's (2016) recognition that their interpretation is related to the context of their inception. This was followed by the students deciding how they were going to use the photographs or aspects of them to tell their place stories.

The notion of palimpsest has, I would argue based on this research, more to offer. The students studied place through incremental activities with each building upon the knowledge of the previous. These have taken place over the course of the research and during the fieldwork through listening to the tour guide they increased their place stories and knowledge of happenings in the place. For example, the medieval peat cutting left a legacy of the Broads waterway in the landscape, so their legacy could not be erased.

A palimpsest of experiences supported the students to develop their place understanding. These allowed the students to express their own aesthetic reactions to having experienced the place while from a geographical viewpoint the students constructed knowledge about the history, human and physical geography of the place. The student's understanding of the place changed over time with reflective contemplation of their experiences leading to contemplating the wider implications of their actions in a place.

A broad interpretation of a palimpsest in this study encompassed Bailey's (2007) "palimpsest of meaning" (p.217) which was evident through the partial transformation of fundamental aspects of the place's infrastructure like the evolution of modes of transport. This included changes in their use and power source. It was evident in the

Broads Authority's use of solar powered tourist boats and the changing use of wherries. However, the application of a palimpsest lens is supportive of a temporal place investigation where past happenings inform our understanding of the present (Bailey, 2007).

Consequently, this study has developed a layered pedagogic approach in how the students developed their study of the place through its planning, embodied sensory fieldwork which involved walking to explore its present surface features. In the tour guide presentation to the students there were themed layers which included the medieval peat cutting, the coming of the Victorian railways, the growth of Roys retail empire, the changing nature of tourism and environmental management of the Broads. These changes have a temporal and spatial theme. The way in which the students represented and communicated their findings were layered, based upon their research, first hand experiences, use of fieldwork activities and artefacts they had collected. The next layer happened after reflection when they decided which aspects of their memories and information they wished to share. The subsequent individual and group presentations were unique after they decided which place messages they wished to highlight. The unfolding layers of information were from an anthropocentric viewpoint with embryonic ideas of how the nonhuman, especially the waterfowl, were affected by human actions. Group 2 provided a presentation from a swan's viewpoint. Such a layer of understanding could open-up the possibility of a different geographical view of ecological events.

8.4 Contributions to academic knowledge

The exploration of finding an alternative place pedagogy led to exploring academic and pedagogic thinking about place. This led to identifying lacunae in research and reflecting over whether filling these identified gaps would be appropriate or relevant for key stage 3 geography. These contributions were from three areas, firstly in making connections between key thinkers and ideas, and secondly through exploring different pedagogies and thirdly in adding to understanding about how to make links between multimodality and geography.

The research brought together the academic geographical thinking about place through the work of Massey combined with the enabling place pedagogy of Somerville. The combination of their ideas ensured a more open approach to the understanding of place,

one which encompassed a recognition of the multiple aspects of being in place through having an embodied sensory place experience. Fieldwork enabled the students to explore the place through walking, seeing and listening to their surroundings. This process responded to a call from Somerville et al. (2011) to find alternative ways of engaging young people with a place, such that they would get to know and care for it in a different way. They were searching for a pedagogy of place that had the potential of engaging the students in the study of a place and during the process, influence how they viewed the place and themselves (Somerville et al., 2011). This approach enabled and encouraged the students to reflect about their place experiences and how they connected with this and future places they might encounter. The students started to relate to the nonhuman aspects of the place in different way which is a recognised area for further research (Massey, 2005b).

Driver (2003) argued that geography needed to pay more attention to considering the relationship between the visual sense and other senses. In this study the students have demonstrated how using their kinetic sense of movement (Thrift, 2008) allowed them to explore the place and use their visual sense to scan their surrounding environment to visually identify any features that they felt were representative of the place. A favourite point of contact being a swan, whose white body contrasted with its surroundings, making it appear as the students recognised, as an iconic feature of the place. The motivating means for carrying out this activity was to record how they interpreted a sense of place through the lens of a camera. Some students acknowledged having used their cameras to record their recognition of different haptic surfaces, textures and features like a flint wall. The students in this research have contributed to Rose's (2003) discussion about how geography is a visual discipline through the way they collected and represented their data. In addition, they started to navigate their way around the place using iconic visual features. They discussed the relative location of these features according to their sensory recognition of their place's characteristic features.

These students used visual images they captured on site to tell their place story and express their sense of place, supported by their observations of happenings in their fieldwork place of study. Their visual senses have been integrated with their other senses. While students took video footage to create their own moving image place story. This visual place interpretation was interpreted and seen through the eyes of Year 9 Geography students. The selection of material included in the place representations

along with their interpretation contributed in this instance to the students' growing place conceptualisation. However, as Rose (2003) indicated, the creation of these visual presentations is not neutral and the students in this instance have followed their own and their group's interests.

The use of photographs in school geography teaching is not a new approach (Selmes and Wallace, 2014). However, the inclusion of examples of some of the photographs that the students took themselves for a form of photo-elicitation during their semi-structured interviews, is not common practice. This was particularly commented upon by Rose (2016) who noted that photo-elicitation studies do not normally include many of the photographs taken by the students, the main exception being the work of Clark-Ibanez (2007) (cited by Rose, 2016, p.326). The photographs included in the students' posters were referred to during the students' interviews so contributing to understanding about photo-elicitation in stimulating student discussions in interviews.

In making their own place video the students contributed to Garrett's (2010) call for human geography to realise how video making could be useful to the discipline. These Year 9 students took video footage of what they perceived to be representative of the place and in the process shared how they interpreted the place. Their video conveyed concern for the nonhuman and highlighted contrasts between the presence of traffic and the natural environment. In the process the students demonstrated the potential of adding digital video making to geographers' tools when studying a place. The students in this research contributed to Garrett's (2010) discussion about the underutilisation of videos by showing what students with an interest in the environment and technology can achieve.

During the process of editing the video the students have manipulated time through their negotiation of time-lapse footage to reduce a long boat cruise into a matter of seconds (Garrett, 2010) and in the process told their own place story. The video is structured with a clear, beginning, middle and end and in the process of telling a place story seen through the eyes of the students. They have expressed which aspects of the environment captured their attention. The students in this research demonstrated the potential of experiential video production for key stage 3 geography in the study of place to create a visual place documentary. The contribution was achieved through the students' bringing in their own video camera.

The making of a place related video, use of photography, writing postcards and poetry and creating multi-modal presentations are contributory evidence of the diversity and cumulative ways in which place can be investigated in geography. Furthermore, they provided evidence for Somerville's (2010) "emergent arts based methodology" (p.340) which questioned existing routes of enquiry and representation, to stimulate the emergence of new knowledge. The way in which these students in a western secondary geography context have researched and represented a place, through having an embodied sensory experience, added to Somerville's (2010) broad understanding of the concept of story and storytelling. This included the use of photographs, sound recordings, textural comments, poetry, artwork, as well as scientific findings. This research has extended Somerville's (2010) recommendation that feminist post structural use of language alone is not adequate to represent place findings through multimodality in supporting students in their search for meaning.

The students in this research have used multimodality to enhance their ability to represent their research interests which extended beyond maps. The students used Kress's (2014) interpretation of a mode as a cultural and social means of creating meaning, to support their ability to express their affective place understanding. The support of working within a group provided an opportunity to discuss their nascent ideas. The students' resulting representations provided a means of deepening their contextual conceptual knowledge. This example adds to Jewitt's (2008) discussion about reconfiguring the means of communication in the twenty-first century, in this instance, within a geography classroom to support student learning. The students carried their interest in design and modal choice into their group sensory findings to support the communication of their findings.

This research is contributing to Rawling's (2018) discourse about relating the study of place to a detailed place in school geography. This study has demonstrated the potential of developing interdisciplinary links through the range of ways in which the students' have represented their place findings. They have achieved a lively study of place through focusing on one place not a theme, a feature that Rawling (2018) felt was a missed opportunity in the recent examination reforms. She noted the current KS3 geography content is primarily descriptive with the start of explanatory work (Rawling, 2018). However this study has suggested an alternative way of studying place in secondary

geography, the significance of which is demonstrated from Rawling's (2018) statement: "[P]lace is one of the most important interdisciplinary concepts of the twenty-first century, and it should be at the heart of school geography." (Rawling, 2018, p.59). This study's focus on a named place has supported the students in the challenge of studying place as an idea, which Rawling (2010) felt has "stalled" (p.51) in school. These students in adopting a Somervillian approach have explored the idea of place through using their senses to get to know its multiple identities and created a different view of a place. At the same time, it has contributed to Lambert's discussion relating to how to introduce students to think about the world: "[T]o introduce the world to students as an object of geographical thought requires pedagogic ingenuity, for subject knowledge may otherwise remain unconnected and 'inert'." (Lambert, 2017, p.20).

The significance of the concept of place to the study of geography was similarly acknowledged by Cresswell (2015) who declared it to be the discipline's most noteworthy concept. The expression of the students' findings has encompassed the human and nonhuman and supported them to tell a different story of a place. Their stories have meaning through their individual expressions of a sense of a real place. In the process the students were able to talk about their study of the multiple aspects of a place, a plea that Cresswell (2008) made about students attending university geography interviews.

8.5 Relationship to previous research

This research has built upon the work of Somerville's (2010, Somerville et al., 2009, 2011, 2015) in developing an alternative place pedagogy. In applying Somerville's place pedagogy to English secondary geography, it has demonstrated how the approach is influential in supporting students in getting to know a place in a different way. The alternative pedagogic way in this instance involved having a sensory embodied experience and learning about a place through stories which included encompassing different views and geographical issues. In the context of this research the pedagogic contribution of a Somervillian approach (2010) along with Massey's (2005a) conceptual understanding of place has suggested a different way of supporting students to develop deeper place connections. There are several ways in which this research varied from Somerville's (2010) place pedagogy because of the different cultural situation this current research has not supported a zone of cultural contestation. Consequently the zone of cultural contestation has been translated into searching for areas where there is an

element of consternation which included examining issues like litter, river bank erosion, eutrophication, agricultural practices and water quality, raising river boat users awareness especially of tourist of the implications of speeding, emptying bilges directly into the Broads, wildlife management and taking the swan's perspective, providing a different environmental view.

During the initial planning, the uncertainty of a different pedagogic approach which afforded the students a voice in how they developed and represented their findings, meant the students needed time to adapt to becoming more independent learners. In addition, during fieldwork the students required time to acclimatise to being in a place and find their bearings in their study location, which was not their local area, to enable them to get to know the place. This time for exploration reaped dividends in supporting the students to get to know the place in a different way and settle into the research (Job, 1999). The time spent acclimatising to a new situation it enabled the students to collect meaningful located sensory data to confidently create a sense of place. It supported the students to start to take ownership of their research and become more autonomous engaged learners. This research is contributing to Lambert's (2017) concern about the need for an engaged curriculum: "[W]hen we operate with a clear sense of geography's big ideas we are more able to demonstrate the value of the discipline. Rather than a curriculum of compliance, which compels us 'to cover the content', what is needed is a curriculum of engagement, where we can move children and young people, step by step, into a world of ideas: that is what the GA implied by calling its manifesto *A Different View*." (Lambert, 2017, p.27). Lambert (2017) has recognised place as one of Geography's 'big ideas' along with space and the environment, all three are integrated in geography fieldwork related to the study of place.

This research develops Somerville's research in supporting students to engage with place in a multiplicity of ways. This is sympathetic with the United Nations Convention on the Rights of the Child Article 13 where children are encouraged to express themselves in a variety of modes and formats. This research initially started by giving the students cameras to support them to focus their field of vision on features in their study location. At the same time, it enabled the students to be able to subsequently communicate their findings in a variety of ways, according to the child's choice. For example, sketches, sound recordings, digital images and a video, numerical data and maps, all of which are reminiscent of the broad way in which Somerville (2010) interpreted stories. The different

modes provided the building blocks for the students' storying. The varied activities supported the students to know a place in a different way, such that they could confidently discuss their place knowledge. From this the students started to develop an interest and concern about the place's future. This extended to starting to consider their role in caring for the environment and their actions in their local places. In the end the students are contributing to Somerville's (2010, Somerville et al., 2011) search for a different place pedagogy, one that would encourage young people growing up in a global world to come to know and care for their local places in a different way.

A key difference between the Australian research into an alternative place pedagogy and this research was that the former was searching for a "trans disciplinary pedagogy of place" (Somerville et al., 2011, p.1) while this investigation is situated within a single subject discipline, geography. Nevertheless Rawling (2018) recognised place as a key concept of this century. The Australian research has a broader vision in their study of place in linking it to educational solutions for how young people might live out their lives more sustainably on planet earth because of the perceived failure of techno-scientific solution (Somerville et al., 2011). The past restricted view of the English approach is influenced by key stage 3 geography that has given sustainability such a high profile: it is not mentioned within the reformed document (DfE, 2013). However recent developments such as DEFRA's White Paper, *A Green Future: Our 25 Year Plan to Improve the Environment* (2018) suggests this may indicate the need for change. However, the Australian and English research agendas have followed a similar aim in changing students' relationship to places. In Somerville's (2013a) case by changing the stories that are being told about a place and in this research to extend place thinking beyond a closed hypothesis testing approach to develop deeper place connections to support conceptual understanding about place.

The theoretical contribution of this research is in demonstrating how students can learn to know a place differently through incremental activities which act as a palimpsest with each layer adding to and refining the earlier findings. There are parallels with Somerville's (2013a) developing storylines, where there are incremental layers of stories. This process of storying has its roots in Aboriginal and Torres Strait Islander cultural knowledge, whereby it is an ontological process and their production influenced the individual to develop different ways of being in the world. This has been influenced by the connections the students started to make with the local ecology with one group telling a

place story from a swan's perspective. The whole experience of making embodied place connections has allowed the place pedagogy to be open and supported the students, as Somerville (2010) suggested it could, to interact with the place of study.

The place knowledge is incremental through following a palimpsest approach to the learning of place with layers of understanding which have temporal and spatial elements. This has supported the students' exploration of the place's past, present and future trajectories which is reflective of Massey's (2005a) understanding of place. The students' have been supported in their negotiation of time through their use of time-lapse footage in editing their place video. The use of gerunds in poetry writing has explored the temporal dimensions of human and nonhuman place related actions. At the same time this research is appreciative of exploring solutions to on-going environmental issues like energy use and river bank erosion. The potential liminal stage of creating fresh understanding is recognised by Somerville (1999) to occur through the representation of findings. In this instance, some students' understanding of place related information occurred through making a collage while for another the recording of birdsong made her realise the importance of nature. Fresh understanding came from supporting the students to explore and find things out for themselves, for example the group with their litter investigation.

The research set out to find an alternative place pedagogy and, on the way, encountered a palimpsest of findings. The concept of a palimpsest is compatible with a postcolonial lens in searching for new approaches with attempts to move forwards from past happenings, and the idea of a palimpsest allows cultural influences to survive, which is apparent through remaining place names.

The combined findings of this research guided by those of Massey and Somerville confirm the significance of walking as a means of exploring place and in appreciating the geographical configuration of its human and nonhuman interrelated constituents.

8.6 Limitations of the research

The research has made contributions to study of place in key stage 3 geography it should be stressed that the work has only been with one class with 24 students. The limitations related to the small scale nature of this study. Consequently, these findings are focused around how this group of students studied one place through geography fieldwork. The findings of my research are restricted to how this group of students engaged with this

place via a sensory pedagogy and represented their findings related to their interests. Another group of students in a different setting may obtain different results especially if the approach is introduced into a larger student group.

The group contained students of above and average ability, which suggests the findings may be different in a class with an alternative ability structure. The students were given a package of resource material to familiarise themselves with the area before their fieldwork visit. This included on and off-line resources for the students to read and familiarise themselves with the study location. However, the findings of my study do not suggest future groups of students will react in the same way to being afforded more autonomy and carry out investigative work for themselves. Its findings may not be transferable to other locations.

This research was introduced into a busy classroom which precluded having time at the end of each lesson to spend additional time clearing away. Consequently, the time available to trial the approach was limited to dovetailing it within an existing teaching unit on tourism which included a study of tourism in one place. This would normally involve the students in studying a place through a day's fieldwork to experience the effects of tourism in this location.

However, I would argue strongly that the findings should not be undervalued because of the unique nature of this current research. The students have taken a broad approach to investigating place through linking mind and body (Somerville, 2010) to gain deeper place connections. The study is reflective of the GA's Manifesto, *A Different View* (GA, 2009) in its advocacy of a "living geography" (p.13) which recognised the past in the present study of a place that is still evolving. At the same time, it has included a study of the 'real world' (GA, 2009) through fieldwork which is deemed to be a fundamental part of geography teaching (GA, 2009) and learning.

8.7 Implications of these findings for geography pedagogy

This study has suggested evidence for an alternative place pedagogy for the classroom. My proposed suggestions for a different place pedagogy are summarised in Figure 64. The summary diagram outlines the structure of an alternative place pedagogy for key stage 3 geography which encompasses Somerville's (2010) place pedagogy and Massey's (2005a) conceptual thinking. It has three key elements: place, pedagogy and student

learning. This section summaries the component parts and their interrelationships outlined in Figure 64.

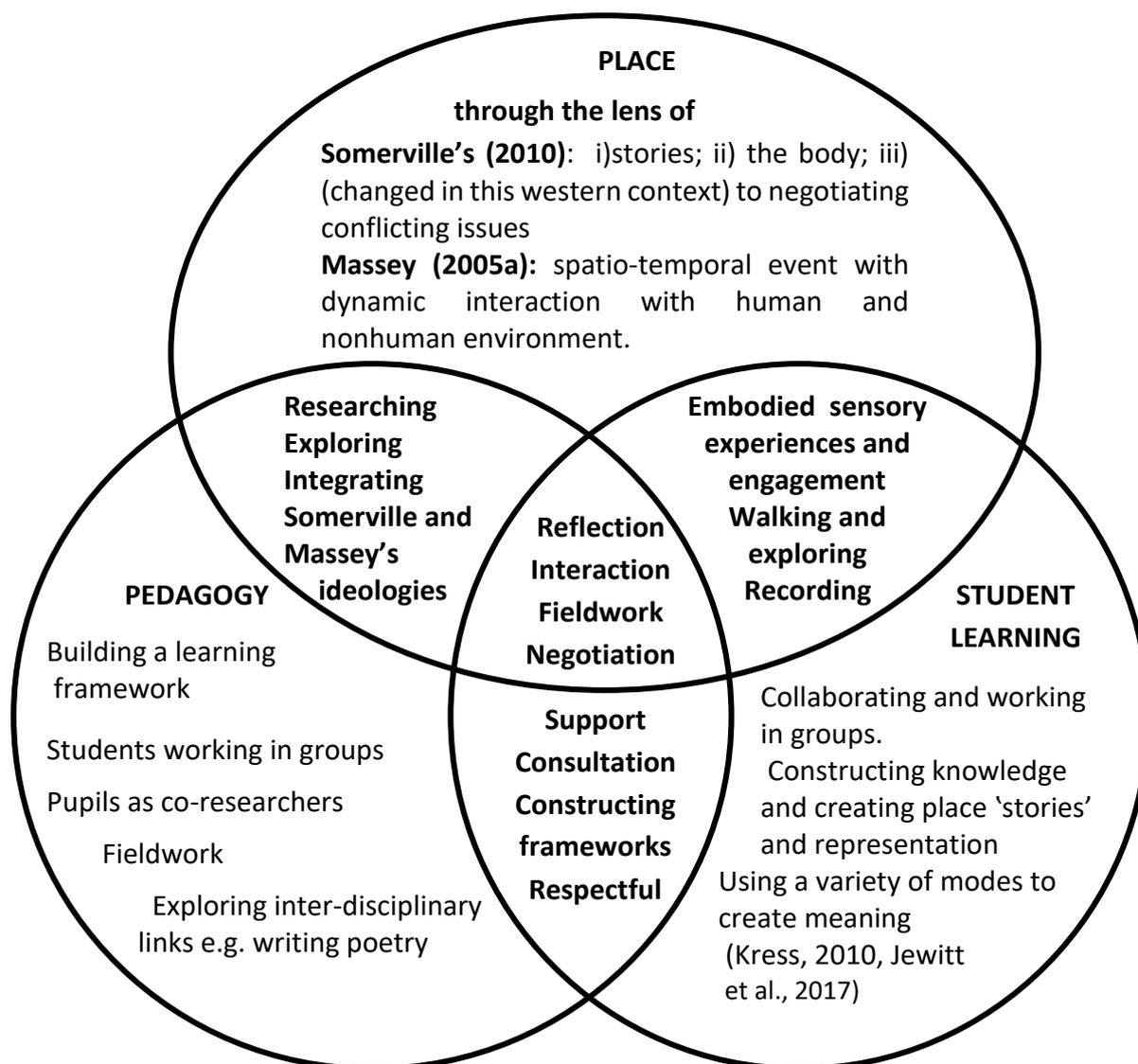


Figure 64. An alternative place pedagogy for Key Stage 3 Geography

The first section on place is constructed around Somerville's (2010) place pedagogy and Massey's (2005a) conceptual understanding, which provides a temporal and spatial dimension. This study has adapted Somerville's third element of her place trilogy from "contact zone of cultural contact" (Somerville, 2010, p.338) to negotiating conflicting issues. This in no way detracts from the significance of Somerville's work with Aboriginal and Torres Strait Islanders and the wealth of knowledge they bring to shaping this alternative place pedagogy. When carrying out their place fieldwork, the students were vigilant in searching out conflicting issues and finding out how they were being negotiated. This approach is sympathetic with Somerville's (2010) ecological work with

the Morwell River wetlands programme in the Latrobe Valley in relation to climate change alongside Victoria's brown coal fired power stations.

Within this research the teacher's role would be one of negotiation in terms of liaising with conceptual and locational place knowledge and building up a respectful relationship with the students. This is reflective of the emphasis Lusted (1986) gave to the interaction between teacher, student and knowledge being studied and created. For successful learning and knowledge production to take place there needs to be as Sellar (2009) recognised a respectful relationship between all parties involved. Such an approach is reflective of Stake's (1995) search for intrinsic understanding from within a case study in adopting this alternative place pedagogy for key stage 3 geography. This is essential in this research which in its search for an alternative place pedagogy did not want a closed pedagogy. Instead through supporting the students to take an active role in planning, executing and representing their findings it has encouraged an open pedagogy where the outcome was unknown at the outset. The importance afforded to pedagogy is reflective of Lusted's (1986) recognition of its significance in the process of knowledge production.

The study has provided scope for students to develop Lambert's (2011) "core knowledge" (p.251) through their use of "geographical vocabulary" (p.251) of factual subject knowledge and "grammar" (p.251) of relevant conceptual understanding, in this instance focusing on the study of place. For this to be developed in relation to the study of one place it required preparatory visits, ideally talking to local knowledge holders which included librarians, researching information in the local library, finding out about the place's history, geography, geology, population changes, development plans and current issues. This layer of preparation is essential if it is to move the study of a place from being an "object of study" (Rawling, 2018, p.50) or an idea to the study of a real place. To achieve this, required an investigation into past, present and future happenings in the place. I argue that such an approach would lead to sharing with the students that they are going to be taking an active part in studying a real place and contributing to understanding about how it works. This is reminiscent of Massey's (2005a) recognition of the need to negotiate the "throwntogetherness of place" (p.141) which included its temporal development without losing a sense of wonder for the configuration of its human and nonhuman elements.

The students' in this study valued listening to local experts for gleaning local contextual knowledge. In fact, there was a suggestion from one student that they should have talked to more local people to find out what was happening in the place. The following comment was a reflective one made when the student was discussing the research with his fellow group member:

PA: "I definitely think we should have talked to more locals because they really have a good idea about where they are and what they do here because that is obviously their home, where they live, where they go to work and I think if we had more of their opinions and although it is a bit scary asking people it would be really helpful because they know exactly what they are doing because they know exactly what they are doing because they have been here for so long. If they say changes are due, **changes are due.**" (bold denotes intonation in student's voice).

Interestingly several students expressed how much they valued listening to local people. However, it does take time making these contacts and negotiating how their local knowledge could be incorporated into a geography fieldwork study of a place. PA's comments are insightful in suggesting a study of place should not be a static one, and in this narrative, he realised their study would be of a place that would continue to evolve after their visit. In this instance the student has shared Massey's (2005a) temporal dimension to the study of place and suggested a way of negotiating it through trying to discover how the place needs to change to meet future needs.

The teacher's role within this facilitating pedagogy is a preparatory one in terms of ensuring the infrastructure is present to support an alternative way of teaching and learning about a place. The teacher's role is fundamental in creating a facilitating learning environment through deciding how to organise the class into effective working units during their fieldwork. This is essential to meet health and safety requirements. On another level if the group dynamics are right the students can work collaboratively and effectively in a supportive working atmosphere. It is up to the teacher to decide the level of autonomy that is appropriate for their students. However, these students valued being given the opportunity to research their own aspect of the place. This approach is reflective of the United Nations Convention on the Rights of the Child (UNCRC, 1989) which the UK ratified (Lundy, 2007). The UNCRC (UNCRC, 1989) argued for giving children a 'voice' to express their views according to their age and ability and with this came a recognition that they should have a choice in the medium through which they

could achieve this (Lundy, 2007). The ideas of the UNCRC are reflected in this study's aim to support the students in contributing and shaping the course of their place investigations. However, to achieve this the students needed support in the planning and execution of this, especially in ensuring there are a variety of modal means available from which they could choose. Translated to this case study, it included supporting the students in following their interests in exploring the place and supporting them in their choice of how they wish to communicate the findings of their group investigations.

The students in being afforded more autonomy and if working in groups, will have implications for the arrangement of desks within the classroom during the planning and follow-up activities. There are implications for ensuring the students have access to the appropriate technology to support their learning activities at each stage along their place investigation. They may need additional training if I Pads or video cameras are available for their use. A simple introduction to the different modal means available to support how they represent their findings could ensure the students' different learning needs are met. At the same time, it would ensure they are not constrained by the limits of language (Kress, 2010) or constricted when trying in Massey's view to "tame the spatial into the textual" (Massey, 2005a, p.20). This would support Somerville's (2008a) concern about the loss of intertextual meaning. Moreover, multimodality supported students in this study to represent and communicate their affective feelings and aesthetic appreciation of the wealth of environmental and natural sensory human and nonhuman features they experienced during their place explorations.

8.8 Recommendations for future research

The findings from this research suggest a future study should have a clear audience in mind from the outset, possibly working towards having the students' work collated in a book or folder. These students' work was displayed within the classroom, but it could possibly be shared with future classes and placed on a school intranet site. The findings from this research suggests one avenue for further study might include introducing this alternative place pedagogy in other contexts with key stage 3 geography students. Key stage 3 students like those students in Somerville's (2012) study could produce a book or at the very least a class scrapbook of their findings. This could have a wider audience if it involved their local place. The findings could be compared with those of students in subsequent years so monitoring how the place has changed.

The students in this research were afforded a voice in planning their research following the recommendations of the United Nations Convention on the Rights of the Child (UNCRC, 1989), Article 13. To facilitate students having their views listened to there is a need for adult support (Lundy, 2007). This area of research could be extended in relation to planning fieldwork.

The findings of a study into the school's local environment could be shared with another school in a different part of the country or abroad. This is the case with the frog census work that Somerville (2012) was involved with in a local primary school, was shared through a local wetlands' ecology website. In addition, the information was being shared with another school in Oregon in the United States and stored in books. Consequently, these children had an audience who were keen to read their findings.

Funding could be made available possibly through sponsorship to provide a department with i-pads which could be shared amongst the students, working in groups. Each group could be responsible for collecting images or making a video of a different aspect of their place of study. This could explore Somerville's (1999) support for photography as a means of linking the subject and the object and extend the investigation to using the genre to support students in writing their place story. The i-pads could possibly be used to carry out interviews about a place with local citizens. To support the participant in responding to the questions it would help if they could be shown or sent the questions in advance to allow time for reflection over relevant information to share with the students.

A longitudinal study could monitor the long-term environmental interests of the who have participated in this approach to the study of place.

Another avenue for further study would be to explore inter-disciplinary links with English, relating to writing poetry about place. This avenue was raised by Meinig (1983) in a guest lecture at the Annual Conference of the Institute of British Geographers, entitled *Geography as an art*, which questioned whether geographers could create literature. There is a growing number of academic geographers who have become practising poets writing about place, for example Simon Armitage (2015) and Tim Cresswell (2014). This would be sympathetic with Rawling's (2011) expressed concern that geographical studies of place appear to have undervalued the affective element of being in place. The significance of poetry writing through place experiences in geography has increased, especially as Rawling (2018) identified it as a potential means of saving the planet.

There is scope to explore links with higher education as Rawling (2018) recognised school geography teaching appears to have “stalled” (p.51) in relation to academic geography. One aspect of sensory research that Paterson (2009) recognised as having a gap in higher education related to haptic geographical knowledge. This Paterson (2009) considered to be an under-researched area. Haptic understanding relates to touch which could be extended to bodily feelings through movement in geography fieldwork (Paterson, 2009). Indeed Paterson (2009) recognised it appears to have suffered in western research because of the dominance of visual knowledge. Haptic knowledge could be integrated into school geographical studies about place. This would be compatible with this research which does not support mind/body dualistic thinking (Somerville, 2010).

My study offers suggestive evidence of the potential of multimodality within geography in helping students to express their meaning about their sensory place findings. Further research could investigate the potential of sharing knowledge about modal affordances with students to support them in their ability to express their fieldwork sensory place findings which may be difficult to express in words. This is an on-going challenge, with Darby (1962) entitling his presidential address to the Institute of British Geographers, *“The Problem of Geographical Description”*. In this address Darby (1962) discussed the dilemma of articulating “a visual impression” (Darby, 1962, p.1) of landscapes in words. This could open-up the idea of creatively exploring different means of representation that extend to a palimpsest or the evolution of their study location. This could be explored through overlays of maps and artefacts.

The approach followed in this research would prepare students to participate in the UK’s current environmental plan for a greener future, A Green Future: Our 25 Year Plan to Improve the Environment (www.gov.uk/government/publications.2018) published in January 2018. In this the current Secretary of State for the Environment, Food and Rural Affairs, pledged to hand the planet to the next generation in an improved state than this generation had inherited it. To do this, sustainability is high on the agenda to improve natural capital which relates to our ecosystems including our air and water and its sustainable management (www.gov.uk/government/publications.2018). To do so would involve educating young people about nature, including supporting more outdoor contact with nature. At the same time a link was established between well-being, health and being in the natural world (www.gov.uk/government/publications.2018). 2019 is to be designated an action year for the environment with improved access for schools to visit

outdoor green sites with one of the identified ways of supporting this access through the reformed geography curriculum which is supportive of fieldwork (www.gov.uk/government/publications.2018). However, the geography key stage 3 programme of study does not refer to sustainability education (DfE, 2013). The omission of sustainability and climate change from the 2013 key stage 3 geography national curriculum, was particularly remarked upon by Hopkin (2013) who noted it left environmental geography with a lower profile than in the 1992 Geography national curriculum. This research with its focus on embodied sensory experiences and a range of ways of representing findings, could provide the means to support a higher environmental profile.

In the initial planning stages of the research with the class teacher, a significant amount of time was spent planning a Geography Journal which the students could use for making notes about their research. The journals had a brown hardback cover to allow the students to write or draw in them. The inner cover included suggestions of what could be included in the journal. Inside there was reference material including population census information, a satellite image of their study area and areas to make rough drafts of poems. There is further information about journal or diary writing in geography in the work by Punch (2012) and Walshe's (2012) dialogic diaries with secondary school students. In this instance Walshe (2012) used the journals to help students to develop their understanding of sustainability. However, there was not time to introduce them in this current research in a busy classroom where students were simultaneously coming to terms with a different approach to fieldwork. There is scope to introduce the technique in a future research project involving a reflective approach to fieldwork where students have an input into shaping the trajectory of their place research. It would give students a chance to air their views about the place including their understanding. At the same time, they could share their views of which aspects of the place and its environment interest them.

8.9 Concluding comments

This research has explored the introduction of an alternative way of teaching place in Key Stage 3 Geography with a class of Year 9 students as part of their Year 9 Geography curriculum. In adopting a Somervillian approach, with learning taking place through their embodied senses, the data demonstrated that the students came to make deeper place

connections. In the process of making connections with their human and nonhuman environments the students have demonstrated how this approach could contribute to Rawling's (2018) discussions about the significance of teaching the idea of place in the twenty-first century. The work of Somerville (2010, 2015) has offered a way of developing an understanding of place through stories and storying, with the students having a role in constructing their own interpretation of a place through layers of activities. This would address Massey's (2005a) interpretation of place being dynamic with a past, present and unknown future. In addition, the use of multimodality has supported the students to convey their place interpretations through a variety of layered presentations. The choice of how they shared their messages about the place and created their own reflective sense of place was an empowering and engaging experience.

My study offers evidence that supports Rawling's (2010) suggestion that being in place and writing about place in a variety of genres including poetry is a way of connecting and raising young people's awareness of place. The findings show how the students have incorporated Massey's (1994, 2005a) view of a dynamic sense of place. During the process of negotiating a palimpsest view of how the place has evolved over the centuries and is continuing to do so while tackling current environmental issues. The students' pedagogic approach has followed a palimpsest in building from their initial steps into planning the trajectory of their place. This was followed by walking and using their senses to connect and record happenings from which subsequent meaning emerged during their incremental representations. These were informed by students following their interests supported by the infrastructure of multimodality to create a plethora of ways of representing their findings to develop their affective and cognitive place understanding. From the students' perspective they valued their experiences, especially having cameras to record their features and finding out information for themselves:

Researcher: Thank you very much. Is there anything else you would like to tell me about this, that you feel I should be aware of?

PA: It was very enjoyable and I would rate it if someone else wanted to do the exact same thing, obviously not the exact same thing, but you know if they did it again.

Researcher: Thank you. Now what do you feel, if anything, you've got out of taking part in the research?

PD: I feel I've got a far greater understanding of what a place is like and I think if I go somewhere in the future I will be looking in more depth at places like to understand it more than just seeing it as it is at face value and like I think I

appreciate the nature and the environment more that I have previously would have from looking at it closer that I have before.

PE: Yeah, I also feel like I have a better understanding of the place and I shouldn't just take things for granted and that I should really take care with places and the environment.

These are a selection of comments of what the students' felt about being a part of the alternative place research. One of the unexpected outcomes in the search for an alternative place pedagogy was the students starting to express concern for their study location, other places and to start to reflect over their role in contributing towards environmental care.

The students' comments suggest this research could contribute to Somerville's (2010) discussion about what sort of education would help to build stronger relationships with local places in the fight against climate change. While these findings recommend climate change and sustainability become part of the Geography key stage 3 programme of study, so integrating another layer to the palimpsest of knowledge about place. In so doing it would address Massey's (2014) argument that we need to take responsibility for the world, a global place.

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Appendices

Appendix A

Consent Letters

Appendix A1

Opt in letter for Class Teacher

An Investigation into an alternative place pedagogy

PARTICIPANT INFORMATION STATEMENT

(1) What is this study about?

You are invited to take part in a research study about how pupils can get to know a place through using their senses, for example the senses of sight, sound, texture, smell and movement. The research will investigate whether this will enable young people to get to know and care for a place differently.

You have been invited to participate in this study because the Geography department at xxxxxxxxxx has offered to accommodate the research around their geography fieldwork in Wroxham. This Participant Information Statement tells you about the research study. Knowing what is involved will help you decide if you want to take part in the research. Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

Participation in this research study is voluntary. By giving your consent to take part in this study you are telling us that you:

- Understand what you have read.
- Agree to take part in the research study as outlined below.
- Agree to the use of your and your pupils' information as described.

(2) Who is running the study?

The study is being carried out by the following researcher: Mrs. Alison Brown, Postgraduate Research student at the University of East Anglia

(3) What will the study involve?

It will involve my coming into your classroom as a researcher and your agreeing to take part in the research in finding an alternative place pedagogy, which aims to use the senses. I would like to discuss the preparation of the material with you beforehand, to ensure it can be dovetailed into your existing unit of work on tourism in Wroxham.

The pupils will prepare fieldwork activities in Wroxham, which include collecting information about the place using their senses, which may be sight, sound, touch, smell or movement. They will work in groups in their normal geography lessons preparing the work. Afterwards they will use the collected information to creatively present it. They will have the opportunity to use technical equipment, for example videos, cameras or audio recording to support their work. The pupils may be videoed or photographed doing these activities. The pupils will be asked to be interviewed at the end of the work about their experiences. The interviews will be recorded.

(4) How much of my time will the study take?

The research will take part during the pupils' normal geography lessons during the summer term and will last for about half a term. The discussion about the nature of the material, its preparation and how it can dovetail into your existing unit of work will take place at a mutually acceptable time with yourself.

(5) Do I have to be in the study? Can I withdraw from the study once it is started?

Being in this study is completely voluntary and you do not have to take part. Your decision whether to participate will not affect your current or future relationship with the researcher or anyone else at the University of East Anglia.

If you decide to take part in the study and then change your mind later (or no longer wish to take part), you are free to withdraw at any time. You can do this by informing the researcher, Alison Brown in person or by e-mail at Alison.B.Brown@uea.ac.uk or in writing to The School of Education and Lifelong Learning, School of Education and Lifelong Learning, University of East Anglia, Norwich Research Park, Norwich, NR4 7TJ.

You are free to stop the interview about the research at any time. Unless you say that you want us to keep them, any recordings will be erased and the information you have provided will not be included in the study results. You may also refuse to answer any questions that you do not wish to answer during the interview. If you decide at a later time to withdraw from the study (or no longer wish to take part) the information will be

removed from our study records and will not be included in the study results, up to the point that we have analysed and published the results and this would include the submission of the dissertation for assessment purposes.

If you withdraw from the study, we will not collect any more information from you. Please let us know at the time when you withdraw what you would like us to do with the information we have collected about you up to that point. If you wish, the information will be removed from our study records and will not be included in publications, up to the point that we have analysed and published the results.

(6) Are there any risks or costs associated with being in the study?

Aside from giving up your time, we do not expect that there will be any risks or costs associated with taking part in this study.

(7) Are there any benefits associated with being in the study?

We would expect the pupils from completing the study to gain in confidence and improve their ability to work independently. The whole process of planning, carrying out their planned fieldwork activities and creatively representing the results will provide good experience for future research and academic work. It will provide particular benefit for pupils participating in future geographical studies. However, the pupils will gain transferable skills for other subject areas from working in groups, using technical equipment and contributing to the research process.

The pupils will get to know a local area through their senses, the experience of which can be transferred to other areas. From a teacher's viewpoint you will be actively contributing to research which is exploring an alternative place pedagogy.

(8) What will happen to information that is collected during the study?

The information which is collected during the fieldwork study will be used in class to be creatively represented which may take the form of collages of photos, writing, poetry, a sound walk or other forms of presentation. The information can be used in school to create a display and will be photographed to provide evidence for articles about the pupil's work or in conference presentations. The pupils' names will not be attached to any work that is published. If photos are included of the pupils doing the work, their

names will not be attached. Their photo will only be included if written permission is given.

The information collected during the study will be used to provide evidence for my research and be written up in my thesis. It will be used to write articles about the work which will be published in journals. It may be of interest to the Broads Authority. The pupils work will be of interest to other Geography teachers who will be studying place.

The written work from the research will be securely stored in a filing cabinet and in computer folder. The children's name will not be attached to any presented material. The results from the focus group interview will be anonymised. The information will be kept for 10 years and subsequently destroyed.

By providing your consent, you are agreeing to us collecting information about your class for the purposes of this research study. Their information and your input will only be used for the purposes outlined in this Participant Information Statement, unless you consent otherwise. Data management will follow the 1998 Data Protection Act and the University of East Anglia Research Data Management Policy (2013).

The information will be stored securely, and the pupils' and your identity/information will be kept strictly confidential, except as required by law. Study findings may be published. Although every effort will be made to protect your identity, there is a risk that it might be identifiable in publications due to the nature of the study and/or the results. In this instance, data will be stored for a period of 10 years and then destroyed.

We will keep the information we collect for this study, and we may use it in future projects. By providing your consent you are allowing us to use your pupils' and your information in future projects. We don't know at this stage what these other projects will involve. We will seek ethical approval before using the information in these future projects.

(9) What if we would like further information about the study?

When you have read this information, Professor Victoria Carrington will be available to discuss it with you further and answer any questions you may have. If you would like to know more at any stage during the study, please feel free to contact Professor Victoria Carrington at The School of Education and Lifelong Learning, University of East Anglia,

Norwich Research Park, Norwich, NR4 7TJ or by e-mail at v.carrington@uea.ac.uk or by telephone 01603 597236.

(10) Will I be told the results of the study?

You and your pupils have a right to receive feedback about the overall results of this study. You can tell us that you wish to receive feedback by letter or e-mail. You can indicate how you would like to receive feedback by ticking the relevant information on the consent form. This feedback will be in the form of one page summary. You will receive this feedback after the study is finished.

(11) What if we have a complaint or any concerns about the study?

Research involving humans in UK is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this study have been approved under the regulations of the University of East Anglia's School of Education and Lifelong Learning Research Ethics Committee.

If there is a problem please let me know. You can contact me via the University at the following address (until December 2016):

Mrs. Alison Brown

School of Education and Lifelong Learning

University of East Anglia

NORWICH NR4 7TJ

Alison.B.Brown@uea.ac.uk

If you would like to speak to someone else you can contact my supervisor:

Professor Victoria Carrington

School of Education and Lifelong Learning

University of East Anglia

NORWICH NR4 7TJ

v.carrington@uea.ac.uk

Tel.: 01603 597236

If you are concerned about the way this study is being conducted or you wish to make a complaint to someone independent from the study, please contact please contact the Head of the School of Education and Lifelong Learning, Dr Nalini Boodhoo, at n.boodhoo@uea.ac.uk.

(12) OK, I'm happy to take part – what do I do next?

You need to fill in one copy of the consent form and return the other to the school office at (XXXXXXXXXX) marked Year 9 Geography Research (XXXXXX). Please keep the letter, information sheet and the 2nd copy of the consent form for your information.

This information sheet is for you to keep

TEACHER CONSENT FORM (1st Copy to Researcher)

I, [PRINT YOUR NAME], consent to participating in this research study.

In giving my consent I state that:

I understand the purpose of the study, what I will be asked to do, and any risks/benefits involved.

I have read the Information Statement and have been able to discuss my involvement in the study with the researcher if I wished to do so.

The researcher has answered any questions that I had about the study and I am happy with the answers.

I understand that being in this study is completely voluntary and I not have to take part. My decision whether to take part in the study will not affect my relationship with the researcher or anyone else at the University of East Anglia now or in the future.

I understand that I can withdraw from the study at any time.

Individual Interview. I understand that I may stop the interview at any time if I do not wish to continue, and that unless I indicate otherwise any recordings will then be erased and the information provided will not be included in the study. I also understand that I may refuse to answer any questions I don't wish to answer.

I understand that I may leave the focus group at any time if I do not wish to continue.

Appendix A2

Opt in letter for Parents

An Investigation into an alternative place pedagogy

PARTICIPANT INFORMATION STATEMENT

(1) What is this study about?

Your child is invited to take part in a research study about how to get to know a place through using their senses, for example the senses of sight, sound, texture, smell and movement. The research will investigate whether this will enable young people to get to know and care for a place differently.

Your child has been invited to participate in this study because the Geography department at xxxxxxxxxx can accommodate the research around their geography fieldwork in Wroxham. This Participant Information Statement tells you about the research study. Knowing what is involved will help you decide if you want to let your child take part in the research. Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

Participation in this research study is voluntary. By giving your consent to take part in this study you are telling us that you:

- Understand what you have read.
- Agree for your child to take part in the research study as outlined below.
- Agree to the use of your child's personal information as described.

(2) Who is running the study?

The study is being carried out by the following researcher: Mrs. Alison Brown, Postgraduate Research student at the University of East Anglia under the supervision of Professor Victoria Carrington.

(3) What will the study involve?

Your child will be asked to plan and carry out fieldwork activities in Wroxham, which include collecting information about the place using their senses, which may be sight, sound, touch, smell or movement. They will work in groups in their normal

geography lessons preparing the work. Afterwards they will use the collected information to creatively present it. They will have the opportunity to use technical equipment, for example videos, cameras or audio recording to support their work. The pupils may be videoed or photographed doing these activities. The pupils will be asked to be interviewed at the end of the work about their experiences. The interviews will be recorded

(4) How much of my time will the study take?

The research will take part during your child's normal geography lessons during the summer term and will last for about half a term.

(5) Does my child have to be in the study? Can they withdraw from the study once they've started?

Being in this study is completely voluntary and your child does not have to take part. Your decision whether to let them participate will not affect your current or future relationship with the researcher or anyone else at the University of East Anglia or the school or the teacher.

If you decide to let your child take part in the study and then change your mind later (or they no longer wish to take part), they are free to withdraw at any time. You can do this by informing the researcher, Alison Brown in writing either by e-mail at Alison.B.Brown@uea.ac.uk or at The School of Education and Lifelong Learning, School of Education and Lifelong Learning, University of East Anglia, Norwich Research Park, Norwich, NR4 7TJ.

Your child is free to stop the interview at any time. Unless you say that you want us to keep them, any recordings will be erased and the information your child has provided will not be included in the study results. Your child may also refuse to answer any questions that they do not wish to answer during the interview. If you decide at a later time to withdraw your child from the study (or they no longer wish to take part) their information will be removed from our study records and will not be included in the study results, up to the point that we have analysed the results in December 2016.

If your child takes part in a focus group, they are free to stop participating at any stage or to refuse to answer any of the questions. However, it will not be possible to withdraw

their individual comments from our records once the group has started, as it is a group discussion.

If your child withdraws from the study, we will not collect any more information from them. Please let us know at the time when they withdraw what you would like us to do with the information we have collected about them up to that point. If you wish, their information will be removed from our study records and will not be included in publications, up to the point that we have analysed and published the results.

(6) Are there any risks or costs associated with being in the study?

Aside from giving up your time, we do not expect that there will be any risks or costs associated with taking part in this study for your child.

(7) Are there any benefits associated with being in the study?

We would expect the pupils from completing the study to gain in confidence and improve their ability to work independently. The whole process of planning, carrying out their planned fieldwork activities and creatively representing the results will provide good experience for future research and academic work. It will provide particular benefit for future geographical studies. However, they will gain transferable skills for other subject areas from working in groups, using technical equipment and contributing to the research process.

The pupils will get to know a local area through their senses, the experience of which can be transferred to other areas.

(8) What will happen to information that is collected during the study?

The pupils will be collecting information about their geography visit to Wroxham. This will include visual, aural and other sensory data about Wroxham which could be video, photo or audio. This information will subsequently be used in class to be creatively represented which may take the form of collages of photos, writing, poetry, a sound walk or other creative forms of presentation. The information can be used in school to create a display and will be photographed to provide evidence for articles about the pupils work or in conference presentations. The pupils' names will not be attached to any work that is published. If photos are included of the pupils doing the work, their names will not be attached. Their photo will only be included if written permission is given.

The information collected during the study will be used to provide evidence for my research and be written up in my thesis. It will be used to write articles about the work which will be published in journal articles. It may be of interest to the Broads Authority. The pupils' work will be of interest to other Geography teachers who will be studying place.

The written work from the research will be securely stored in a filing cabinet and in a computer folder. The children's names will not be attached to any presented material. The results from the focus group interview will be anonymised. The information will be kept for 10 years and subsequently destroyed.

By providing your consent, you are agreeing to us collecting personal information about your child for the purposes of this research study. Your information will only be used for the purposes outlined in this Participant Information Statement, unless you consent otherwise. Data management will follow the 1998 Data Protection Act and the University of East Anglia Research Data Management Policy (2013).

Your child's information will be stored securely, and their identity/information will be kept strictly confidential, except as required by law. Study findings may be published. Although every effort will be made to protect your child's identity, there is a risk that they might be identifiable in publications due to the nature of the study and/or the results. In this instance, data will be stored for a period of 10 years and then destroyed.

(9) What if we would like further information about the study?

When you have read this information, Professor Victoria Carrington will be available to discuss it with you further and answer any questions you may have. If you would like to know more at any stage during the study, please feel free to contact Professor Victoria Carrington at The School of Education and Lifelong Learning, University of East Anglia, Norwich Research Park, Norwich, NR4 7TJ or by e-mail at v.carrington@uea.ac.uk or by telephone 01603 597236.

(10) Will I be told the results of the study?

You and your child have a right to receive feedback about the overall results of this study. You can tell us that you wish to receive feedback by letter or e-mail. You can indicate how you would like to receive feedback by ticking the relevant information on the

consent form. This feedback will be in the form of one page summary. You will receive this feedback after the study is finished.

(11) What if we have a complaint or any concerns about the study?

Research involving humans in UK is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this study have been approved under the regulations of the University of East Anglia's School of Education and Lifelong Learning Research Ethics Committee.

If there is a problem please let me know. You can contact me via the University at the following address (until December 2016):

Mrs. Alison Brown

School of Education and Lifelong Learning

University of East Anglia

NORWICH NR4 7TJ

Alison.B.Brown@uea.ac.uk

If you would like to speak to someone else you can contact my supervisor:

Professor Victoria Carrington

School of Education and Lifelong Learning

University of East Anglia

NORWICH NR4 7TJ

v.carrington@uea.ac.uk

Tel.: 01603 597236

If you (or your child) are concerned about the way this study is being conducted or you wish to make a complaint to someone independent from the study, please contact please contact the Head of the School of Education and Lifelong Learning, Dr Nalini Boodhoo, at n.boodhoo@uea.ac.uk.

(12) OK, I'm happy for my child to take part – what do I do next? You need to fill in one copy of the consent form and return the other to the school office at XXXXXXXX and

marked Year 9 Geography Research (XXXXXXXXXX). Please keep the letter, information sheet and the 2nd copy of the consent form for your information.

This information sheet is for you to keep

PARENT/CARER CONSENT FORM (1st Copy to Researcher)

I, [PRINT PARENT'S/CARER'S NAME],
consent to my child [PRINT
CHILD'S NAME] participating in this research study.

In giving my consent I state that:

I understand the purpose of the study, what my child will be asked to do, and any risks/benefits involved.

I have read the Information Statement and have been able to discuss my child's involvement in the study with the researchers if I wished to do so.

The researchers have answered any questions that I had about the study and I am happy with the answers.

I understand that being in this study is completely voluntary and my child does not have to take part. My decision whether to let them take part in the study will not affect our relationship with the researchers or anyone else at the University of East Anglia now or in the future.

I understand that my child can withdraw from the study at any time.

Focus Group Interview. I understand that my child may stop the interview at any time if they do not wish to continue, and that unless I indicate otherwise any recordings will then be erased and the information provided will not be included in the study. I also understand that my child may refuse to answer any questions they don't wish to answer.

I understand that my child may leave the focus group at any time if they do not wish to continue. I also understand that it will not be possible to withdraw their comments once the group has started as it is a group discussion.

I understand that personal information about my child that is collected over the course of this project will be stored securely and will only be used for purposes that I have

PARENT/CARER CONSENT FORM (2nd Copy to Parent/Carer)

I, [PRINT PARENT'S/CARER'S NAME],
consent to my child[PRINT
CHILD'S NAME] participating in this research study.

In giving my consent I state that:

I understand the purpose of the study, what my child will be asked to do, and any risks/benefits involved.

I have read the Information Statement and have been able to discuss my child's involvement in the study with the researchers if I wished to do so.

The researchers have answered any questions that I had about the study and I am happy with the answers.

I understand that being in this study is completely voluntary and my child does not have to take part. My decision whether to let them take part in the study will not affect our relationship with the researchers or anyone else at the University of East Anglia now or in the future.

I understand that my child can withdraw from the study at any time.

Focus Group Interview. I understand that my child may stop the interview at any time if they do not wish to continue, and that unless I indicate otherwise any recordings will then be erased and the information provided will not be included in the study. I also understand that my child may refuse to answer any questions they don't wish to answer.

I understand that my child may leave the focus group at any time if they do not wish to continue. I also understand that it will not be possible to withdraw their comments once the group has started as it is a group discussion.

I understand that personal information about my child that is collected over the course of this project will be stored securely and will only be used for purposes that I have agreed to. I understand that information about my child will only be told to others with my permission, except as required by law.

Appendix A3

Opt in letter for Pupils

An Investigation into an alternative place pedagogy

PARTICIPANT INFORMATION STATEMENT

(1) What is this study about?

You are invited to take part in a research study about how to get to know a place through using your senses, for example the senses of sight, sound, texture, smell and movement. The research will investigate whether this will help you to get to know and care for a place differently.

You have been invited to take part in this study because the Geography department at xxxxxxxx can fit the research around their geography fieldwork in Wroxham. This Participant Information Statement tells you about the research study. Knowing what is involved will help you decide if you want to take part in the research. Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

Taking part in this research study is voluntary. By giving your consent to take part in this study you are telling us that you:

- Understand what you have read.
- Agree to take part in the research study as outlined below.
- Agree to the use of your personal information as described.

(2) Who is running the study?

The study is being carried out by the following researcher: Mrs. Alison Brown, Postgraduate Research student at the University of East Anglia under the supervision of Professor Victoria Carrington.

(3) What will the study involve?

You will be asked to plan and carry out fieldwork activities in Wroxham, which include collecting information about the place using your senses, which may be sight, sound, touch, smell or movement. You will work in groups in your normal geography lessons

preparing the work. Afterwards you will use the collected information to creatively present it. You will have the opportunity to use technical equipment, for example videos, cameras or audio recording to support your work. You may be videoed or photographed doing these activities. You will be asked to be interviewed at the end of the work about taking part in it. The interviews will be recorded.

(4) How much of my time will the study take?

The research will take part during your normal geography lessons during the summer term and will last for about half a term.

(5) Do I have to be in the study? Can I withdraw from the study once I've started?

Being in this study is completely voluntary and you do not have to take part. Your normal Geography teacher will still be in overall charge of the class. Your decision whether to take part will not affect your current or future relationship with the researcher or anyone else at the University of East Anglia or the school or teacher.

If you decide to take part in the study and then change your mind later (or you no longer wish to take part), you are free to withdraw at any time. You can do this by informing the researcher by word of mouth at school, or by e-mail at Alison.B.Brown@uea.ac.uk or in writing at The School of Education and Lifelong Learning, School of Education and Lifelong Learning, University of East Anglia, Norwich Research Park, Norwich, NR4 7TJ.

You are free to stop the interview about the research at any time. Unless you say that you want us to keep them, any recordings will be erased and the information you have provided will not be included in the study results. You may also refuse to answer any questions that you do not wish to answer during the interview. If you decide at a later time to withdraw from the study (or you no longer wish to take part) your information will be removed from our study records and will not be included in the study results, up to the point that we have analysed the information in December 2016.

If you take part in a focus group interview, you are free to stop participating at any stage or to refuse to answer any of the questions. However, it will not be possible to withdraw your individual comments from our records once the group has started, as it is a group discussion. If you withdraw from the study, we will not collect any more information from you. Please let us know at the time when you withdraw what you would like us to do with the information we have collected about you up to that point. If you wish, your

information will be removed from our study records and will not be included in publications, up to the point that we have analysed the information in December 2016.

(6) Are there any risks or costs associated with being in the study?

We do not expect that there will be any risks or costs associated with your taking part in this study.

(7) Are there any benefits associated with being in the study?

We would expect the pupils who complete the study to gain in confidence and improve their ability to work on their own. The whole process of planning, carrying out your planned fieldwork activities and creatively displaying the results will provide good experience for your future studies. It will provide particular benefit for future geographical studies. However, you will gain skills that you can use in other subject areas from working in groups, using technical equipment and taking in the research.

You will get to know a local area through your senses, the experience of which you can use in other areas.

(8) What will happen to information that is collected during the study?

You will be collecting information about your geography visit to Wroxham. This will include visual, sounds and other sensory information about Wroxham which could be video, photo or sound. This information will be used in class to be creatively represented which may take the form of collages of photos, writing, poetry, a sound walk or other creative forms of presentation. The information can be used in school to create a display and will be photographed to provide evidence for articles about your work or in conference presentations. Your name will not be attached to any work that is published. If photos are included of you doing the work, your name will not be attached. Your photo will only be included if written permission is given.

The information collected during the study will be used to provide evidence for my research and be written up in my thesis. It will be used to write articles about the work which will be published in journals. It may be of interest to the Broads Authority. Your work will be of interest to other Geography teachers who will be studying place.

The written work from the research will be securely stored in a filing cabinet and in a computer folder. Your name will not be attached to any presented material. The results

from the focus group interview will not have your name included. The information will be kept for 10 years and then destroyed.

By providing your consent, you are agreeing to us collecting information about you for the purposes of this research study. Your information will only be used for the purposes outlined in this Participant Information Statement, unless you consent otherwise. Data management will follow the 1998 Data Protection Act and the University of East Anglia Research Data Management Policy (2013).

Your information will be stored securely and your identity/information will be kept strictly confidential, except as required by law. Study findings may be published. Although every effort will be made to protect your identity, there is a risk that they might be identifiable in publications due to the nature of the study and/or the results. In this instance, data will be stored for a period of 10 years and then destroyed.

(9) What if we would like further information about the study?

When you have read this information, Professor Victoria Carrington will be available to discuss it with you further and answer any questions you may have. If you would like to know more at any stage during the study, please feel free to contact Professor Victoria Carrington at The School of Education and Lifelong Learning, University of East Anglia, Norwich Research Park, Norwich, NR4 7TJ or by e-mail at v.carrington@uea.ac.uk or by telephone 01603 597236.

(10) Will I be told the results of the study?

You have a right to receive feedback about the overall results of this study. You can tell us that you wish to receive feedback by letter or e-mail. You can indicate how you would like to receive feedback by ticking the relevant information on the consent form. This feedback will be in the form of a one page summary. You will receive this feedback after the study is finished.

(11) What if we have a complaint or any concerns about the study?

Research involving humans in the UK is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this study have been approved under the regulations of the University of East Anglia's School of Education and Lifelong Learning Research Ethics Committee.

If there is a problem please let me know. You can contact me via the University at the following address (until December 2016):

Mrs. Alison Brown

School of Education and Lifelong Learning

University of East Anglia

NORWICH NR4 7TJ

Alison.B.Brown@uea.ac.uk

If you would like to speak to someone else you can contact my supervisor:

Professor Victoria Carrington

School of Education and Lifelong Learning

University of East Anglia

NORWICH NR4 7TJ

v.carrington@uea.ac.uk

Tel.: 01603 597236

If you are concerned about the way this study is being conducted or you wish to make a complaint to someone independent from the study, please contact please contact the Head of the School of Education and Lifelong Learning, Dr Nalini Boodhoo, at n.boodhoo@uea.ac.uk.

(12) OK, I'm happy to take part – what do I do next?

You need to fill in one copy of the consent form and return the other to the school office at Wymondham High Academy and marked Year 9 Geography Research (FAO Mrs. A. Brown). Please keep the letter, information sheet and the 2nd copy of the consent form for your information.

This information sheet is for you to keep

PUPIL CONSENT FORM (1st Copy to Researcher)

I, [PRINT YOURNAME], consent to participating in this research study.

In giving my consent I state that:

I understand the purpose of the study, what I will be asked to do, and any risks/benefits involved.

I have read the Information Statement and have been able to discuss my involvement in the study with the researcher if I wished to do so.

The researcher has answered any questions that I had about the study and I am happy with the answers.

I understand that being in this study is completely voluntary and I do not have to take part. My decision whether to take part in the study will not affect my relationship with the researcher or anyone else at the University of East Anglia now or in the future.

I understand that I can withdraw from the study at any time.

Focus Group Interview. I understand that I may stop the interview at any time if I do not wish to continue, and that unless I indicate otherwise any recordings will then be erased and the information provided will not be included in the study. I also understand that I may refuse to answer any questions I don't wish to answer.

I understand that I may leave the focus group at any time if I do not wish to continue. I also understand that it will not be possible to withdraw your comments once the group has started as it is a group discussion.

I understand that personal information about me that is collected over the course of this project will be stored securely and will only be used for purposes that I have agreed to. I understand that information about me will only be told to others with my permission, except as required by law.

I understand that the results of this study may be published. Although every effort will be made to protect my identity, they may be identifiable in these publications due to the nature of the study or results.

PUPIL'S CONSENT FORM (2nd Copy to Pupil)

I, [PRINT PUPIL'S NAME], consent to participating in this research study.

In giving my consent I state that:

I understand the purpose of the study, what I will be asked to do, and any risks/benefits involved.

I have read the Information Statement and have been able to discuss my involvement in the study with the researcher if I wished to do so.

The researcher has answered any questions that I had about the study and I am happy with the answers.

I understand that being in this study is completely voluntary and I do not have to take part. My decision whether to take part in the study will not affect my relationship with the researcher or anyone else at the University of East Anglia now or in the future.

I understand that I can withdraw from the study at any time.

Focus Group Interview. I understand that I may stop the interview at any time if I do not wish to continue, and that unless I indicate otherwise any recordings will then be erased and the information provided will not be included in the study. I also understand that I may refuse to answer any questions I don't wish to answer.

I understand that I may leave the focus group at any time if I do not wish to continue. I also understand that it will not be possible to withdraw my comments once the group has started as it is a group discussion.

I understand that personal information that is collected about me over the course of this project will be stored securely and will only be used for purposes that I have agreed to. I understand that information about me will only be told to others with my permission, except as required by law.

I understand that the results of this study may be published. Although every effort will be made to protect my identity, I may be identifiable in these publications due to the nature of the study or results.

I consent to:

Appendix B

Field work Activity Booklet

Name:

Teacher:

Form:

How sustainable is tourism in The Broads National Park?

Aim: To collect data to inform your understanding of the unique sense of place of Wroxham, Hoveton and the Broads. To engage with your senses and be **OBSERVANT** of what is going on around you. Consider whether tourism in its present form is sustainable.

Before the fieldtrip: 1. Go through this booklet and discuss with your group how each activity helps you to develop a sensory awareness of Hoveton, Wroxham and the Broads and to consider the sustainability of tourism.

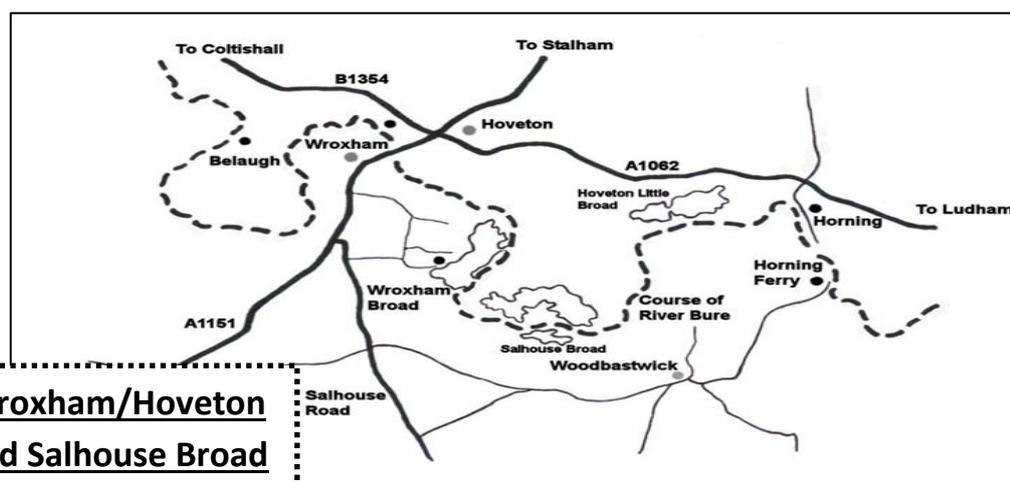
3. Write a definition of **sustainable** on page 12.

2. Complete a risk assessment for your visit.

3. Plan how you will gather information for your group research activity into Hoveton at the centre of the Broads.

4. Remember to jot down your thoughts and observations from your experience of being in a place in your journal. Keep a record of your photos, what you are taking and why you have chosen to take the picture.

Risk assessment and procedures for the fieldwork



WROXHAM BROADS RESEARCH

Aim: To examine how land is used alongside the river and around the Broads and to note possible conflicts.

ACTIVITY ONE: *Conflict can arise between different interest groups using the Broads*

Listen/look out for the following during the boat journey:

Who USES the land along the river?	What for?	What conflicts could occur with other users?	Suggest how these could be managed?

River/broads and along the banks. How might tourism cause environmental harm? Can you suggest ways in which the two can be managed?

Types of wildlife	How might tourists conflict with the wildlife?	Suggest how wildlife and tourism could be sustainably managed

ACTIVITY THREE: What evidence is there of conservation/ protection of the natural environment along the river and broads? Who pays for it? For example look for signs if they are available. Note down examples of conservation / protection of the environment. You can make a sketch or take a photo.

Example of environmental conservation / protection	Where is it?	Who is paying?
Example of environmental conservation / protection	Where?	Who is paying?

ACTIVITY FOUR: Take photographs that give a sense of being in the Broads, to annotate later. Note down any features you see that might help you to assess the impact of tourism in the Broads.

Description of sound	Compatibility between natural environment and tourists	Compatibility between tourists and locals

THE HOVETON VILLAGE SURVEY

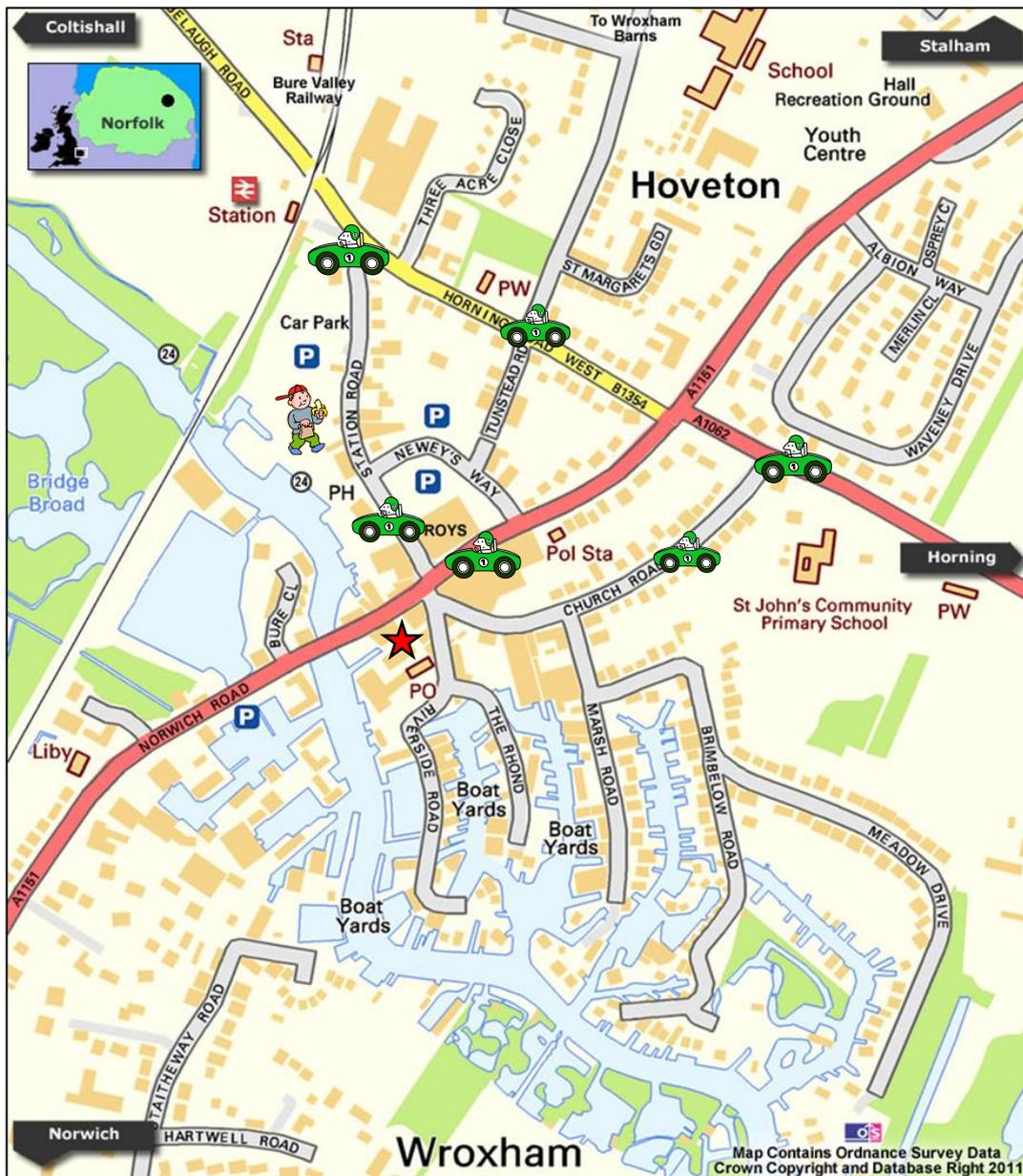
These surveys will be completed by pupils in groups of three or four. You have approximately 2 hours to complete 5 separate investigations, which are:

- Take photos that give a **VISUAL** insight into the unique nature of Hoveton
- For 5 minutes when sitting by the River Bure after lunch **LISTEN** and note down any sounds you **HEAR**
- Questionnaire of how locals and tourists perceive the area and the impact of tourism.
- Do an **ENVIRONMENTAL SURVEY** and note down any examples of pollution **VISUAL**, **NOISE** or **SMELL** in 2 places

- Group investigation to create a unique sense of Hoveton and any issues that it is facing, that might threaten the sustainable future of tourism in the area. You can be very creative in how you represent your findings.

The purpose of these investigations is to gather first-hand information (primary data) to see if there is a relationship between: Tourism and the sustainable development of Hoveton and Wroxham.

You MUST always be working in minimum group-size of 3 at ALL TIMES.



KEY:

- Meeting Point 
- Lunch Destination 
- Boundary of your working area 

SURVEY 1: To create a unique sense of place from being in Hoveton.

ACTIVITY FIVE: Note down any **SOUNDS** that you hear and think help to build up an understanding of the being in the Broads. Are there any unique tourist sounds? **Note down with a tick ✓ if you think they are compatible** with firstly the natural environment and tourists and secondly with tourists and locals, **X if you think the sound is not acceptable to the different groups and – if they tolerate one another.**

Description of sound	Compatibility between natural environment and tourists	Compatibility between tourists and locals

Write down any key **words or phrases** that describe what you **SEE** and **FEEL** from being in Hoveton

Use these words and phrases to write a Japanese Haiku. This will be 3 lines long, with 5, 7 and 5 syllables. You could include metaphors and similes (see the back page). You can write a free verse or poem if you prefer which creates a sense of place.(You can complete this later).

Take PHOTOS throughout your walking around Hoveton to show its unique character. You could include examples of street signs and or other ways text is used in the environment. Keep a note of why you have taken the photo and what it shows.

SURVEY 2: Pedestrian Questionnaire:

*How do tourists and locals perceive Hoveton / Wroxham and the Broads?
Do they consider any aspects of tourism need careful management?*

Complete the questionnaire interviews on the record sheet provided (below). You will need to interview 5 people (the number at the top of each column represents each of the 5 people you will interview). Be careful that you don't block the pavement. Be polite. Allow the people you are interviewing to see the questionnaire.

Question 1:

How far have you come to be in Hoveton?	1	2	3	4	5

a) Less than 1 mile					
b) Norfolk					
c) East Anglia					
d) National					
e) International					

Question 2:

Are you a local or a tourist?	1	2	3	4	5
A local					
A tourist.					

Question 3: Why did you come to the Hoveton / Wroxham and the Broads? (Tally)

a. To enjoy the beautiful landscape	
b. To do a physical pursuit, e.g. boating, sailing	
c. To go fishing	
d. To go shopping	
e. To go bird watching	
f. Other (please state)	

Question 4: Please give 3 words that you feel describe the area.

Interviewee	Word 1	Word 2	Word 3
1			
2			
3			

Question 5: Are there any problems or issues with tourism that you feel need special management?

Interviewee	
1	

Street parking						Off-road parking
Pedestrians unsafe						Pedestrians safe
Pollution (smell)						Pleasant/neutral smell
Ugly						Attractive
TOTAL:						

SURVEY 4: Group investigation

In your group carry out your planned investigation. Your research will have given you an idea of how the area is portrayed in the media. Please indicate which of the following you are researching. Briefly state how you are going to do it, you can continue on the back page. Remember to consider the ethics of photography.

LOW QUALITY	Score					HIGH QUALITY
	-2	-1	0	1	2	
Traffic congestion						Pedestrianised
Low level of housing repair						High level of housing repair
No greenery						Plentiful greenery
Litter						No litter
Graffiti						No graffiti
Dog fouling						No dog fouling
Street parking						Off-road parking
Pedestrians unsafe						Pedestrians safe
Pollution (smell)						Pleasant/neutral smell
Ugly						Attractive
TOTAL						

Research options	Description of how you are going to carry out your research activity
1. Sound walk or audio tour of Hoveton and its tourist attractions. You will be creating an audio-documentary.	
2. Video tour of key features around Hoveton. Add notes for a commentary or to add music afterwards.	

<p>3. How has the built landscape changed over the last 100 years? Look at building materials and architectural styles. You will need to research this beforehand so you know which buildings to look for and where they are located in Hoveton. You can choose how you are going to record this, photos may help. You could build up a story of how Hoveton has changed over the years.</p>	
<p>4. How does the environmental quality vary around Hoveton? Is there evidence of graffiti, litter, different smells, noises and visual scenery.</p>	
<p>5. Create an artistic or photographic (or both) sense of place by doing sketches or taking photos around Hoveton. Look at the book cover of “The Coot Club” by Arthur Ransome for one person’s interpretation. You could add captions.</p>	
<p>6. Record your experiences of different textual landscapes that you see while walking around Hoveton. Make jottings, take photos e.g. of different signs and as you walk around.</p>	
<p>7. Record the different surfaces you walk over and their locations. How do they vary? You might like photographic evidence.</p>	

CONFLICT BETWEEN TOURISM AND CONSERVATION

The coming of the railways during the late 19th century brought the end of self-sufficiency to Broadland people. Goods that would have been transported by Wherry (thus employing local people) now went by rail.

The railways brought tourists, encouraged by the publication of photographs taken by Victorian explorers who ‘discovered’ the Broads.

With the decline of traditional Broads industries such as wherrying and wherry building/repairs, local people sought to earn a living from tourism. Wherries were converted or built to carry passengers, and boats were built for hire.

The Broads tourist industry flourished after the Second World War. The development of motor boats and fibreglass boatbuilding meant that easy to handle boats could be built in large numbers at relatively low cost. Boatyards became major employers of local people.

Other businesses benefitted from the growth in tourism. Pubs, restaurants, shops and other attractions that could not be supported by local people alone prospered. Most of these are still dependent upon the seasonal tourist trade for their survival.

The 1960s and 1970s saw the peak of the Broads hire boat industry. Even though poorly treated sewerage and fertiliser run-off from farmland were causing damage to the Broadland ecology, conservationists were alarmed at the number of boats on the broads and blamed them for the declining Broads water quality and biodiversity. Even when research proved that boating was not causing nearly as much harm to the Broads as had been feared, hire boats were still considered a threat to the Broadland ecosystem.

The hire boat industry went into decline in the early 1980s. Economic recession, negative publicity from conservation groups and the availability of cheap holidays abroad (where sunshine can almost be guaranteed) all contributed to this decline.

Boatyards that hired out boats got rid of or reduced their fleets, and either closed completely or turned over to private moorings for privately owned boats. Either way, fewer staff were required and local unemployment rose. Businesses such as chandlers, engineers, timber merchants etc. who supplied the hire boat industry also suffered.

Since hire boats are charged at three times the rate of toll compared to private boats of a similar size, every boat leaving the hire fleets represents a reduction in income for the Broads Authority. Putting up tolls for private boats in an attempt to make up the short fall only serves to discourage boating. While conservationists might welcome this, money for maintaining the Broads is still required and much of it has to be raised locally.

Employment is also needed. The less popular Southern Broads area has suffered more from job losses than the Northern Broads area, and the Broads Authority has launched a Southern Broads Initiative to promote this area to visitors.

Boatyards are encouraged to diversify, with permission being granted for the building of holiday accommodation and leisure facilities that do not detract from the local environment.

- To maintain the Broads and create a healthy local economy, we need tourism.
- To encourage tourism, we need to maintain the beauty of the Broads.
- To maintain the beauty of the broads, we need income from tourism.

The challenge is to encourage responsible tourism, so that people come to enjoy the Broads and spend their money without damaging the area for future generations of visitors. We need SUSTAINABLE TOURISM. This can be achieved by education, policing and co-operation between groups of Broads users.

GLOSSARY OF TERMS:

Self Sufficiency: People of the Broadlands could earn enough to make their local economy stable.

Wherry: is a type of boat that was traditionally used for carrying cargo or passengers on rivers and canals in England.

Prospered: became wealthy.

Biodiversity: term used to describe the variety of life found in an area and all of the natural processes and the connections between these species.

Chandler: A dealer in supplies and equipment for ships and boat

SUSTAINABLE:

REFLECTIONS ON THE SUSTAINABILITY OF TOURISM: Jot down any suggestions on issues that have arisen because of the tourist use of the Broads. How might they affect the future of the Broads in their present state? Can you suggest any ways of managing tourism in the Broads more sustainably? Is there anything the community could put in place? Consider the input of people into the existing state of the Broads, Wroxham and Hoveton.

EXTRA NOTES:

Appendix C

Guiding questions for semi-structured interviews

With Students

1. What senses have you used in studying Wroxham, Hoveton and the Broads?
2. Do you feel having a disposable camera helped you to engage with Wroxham, Hoveton and the Broads?
3. How do your photos provide ways of understanding the places you visited that could not be easily put into words?
4. Please could you tell me about your posters and why you chose to include the pictures you did. Please tell me about the composition of your chosen photos and poster.
5. Do you feel your understanding of the work was helped from being part of a group or would you prefer to work on an individual project?
6. Do you feel your understanding of place has changed from taking part in the research?
7. Has your study of place influenced how you view the environment and sustainable development?
8. Were there any parts of the work you particularly enjoyed doing or any parts that could be improved?

Discussion questions with the Class Teacher

1. How do you feel the pupils have connected with Wroxham, Hoveton and the Broads?
2. To what extent did they get to know the place through their senses?
3. Do you think pupils can get to know a place without experiencing it?
4. Did giving the pupils encourage them to connect with their surroundings?
5. To what extent do you feel creating collages of their images help to develop a sense of place?
6. How did the pupils experimenting with different ways of representing their work influence their engagement with the place?
7. How is what the pupils did different from how they studied Wroxham, Hoveton and the Broads last year?
8. Do you feel they see place differently or would be more curious about engaging with other places?
9. Was there any difference in their level of engagement than with your group last year?
10. To what extent do you think the process of getting to know the place differently was facilitated by the pupils working in groups?
11. How do you feel they have experienced place differently?
12. How do you feel their experience of place will contribute to the geography curriculum?
13. Has the experiential sensory connection with place contributed to the pupils' environmental awareness and understanding of sustainability?