

Engaging with Interconnected Place for a Hopeful Future

Discussing the potential that place attachment has for encouraging pro-environmental behaviour in an interconnected world

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Abstract

Using primary research from majority-Western respondents in conjunction with an array of multi-disciplinary secondary literature, this thesis acts as a response to claims of the overwhelming existence of 'placelessness' in our modernised and globalised world. Instead, it suggests that place attachment is alive and well in the West. Furthermore this thesis suggests that place attachment can be shown to have positive links to the creation and encouragement of pro-environmental behaviour. Additionally, by integrating interconnectedness perspectives – whereby people exist as part of an interconnected earth – place attachment may further foster beneficial pro-environmental tendencies. Thus, place attachment in this way is posited as a possible partial response to environmental challenges such as climate change.

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I must also thank the many people and places that I have encountered over my lifetime. They have made me who I am, helped me to realise the importance of place attachment and place identity, and opened my eyes to the idea that place attachment is not just something I am interested in, but is something which has the potential to be a worthwhile research topic as we face environmental change.

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Introduction

Acceptance and discussion of climate change and its associated risks and challenges is growing; and concern for the environment has been increasing, particularly since the United Nation's 1987 'Brundtland Report' which famously opened the discussion on sustainable development (United Nations, 1987; Horlings, 2015; Franzen, 2004). However, the current responses to climate change in the so-called 'West' are arguably still not sufficient, and therefore "global environmental change continues to accelerate, exacerbated by anthropogenic climate change" (Walter, et al., 2015, p. 833). In this thesis I posit a potential way to view, and deal with, the changes and challenges that climate change presents for our planet's resilience and biodiversity. This thesis is not sufficient in length nor breadth to deal with every type of environmental problem faced by the planet, and my primary research only focuses on place attachment, pro-environmental behaviour and climate change – therefore this thesis should be understood as discussing only the intersection of these concepts. It is not, and will not be, the ultimate solution to all problems faced by the planet, but posits the possibility of being a part of a complex response to a set of complex ecological challenges.

The response I do suggest however is therefore worthy of consideration as a proposal of hope in the West; hope for a pro-environmental present and future. It is an exploration of the links between not only place and person, but between this place attachment and pro-environmental behaviour. This response is therefore conceptualised around the theoretical concepts of place attachment, place identity, and interconnectedness. I believe them to be important to consider when facing the challenges of climate change, because, as Harvey (1996) summarises: it is "almost impossible to consider environmental issues without at some point confronting the idea of place" (p. 303).

My suggested response therefore revolves around the concept that as modernity spreads and technological and scientific 'fixes' act as the most popular methods to 'combat' climate change, people are nonetheless still connected to place; to their place on and in the world (Lewicka, 2011; Escobar, 2001). This argument contradicts authors such as Relph (1976, in Lewicka, 2011) who argue that increased modernity, globalisation and movement of people has led to a 'placelessness', or lack of sense of place. I argue that sense of place, place attachment and place identity are still very much alive and well, even in my generation and section of modernised Western society. Furthermore, I suggest that there is an opportunity – using place attachment and interconnectedness – to consider a hopeful future for the planet via the encouragement of pro-environmental behaviours.

The importance of place should therefore not be overlooked. It is crucial to note that: "there is no place without self, and no self without place" (Casey, 2001, p. 406 in Devine-Wright, 2013a, p. 62). Thus, the way in which a place forms part of a person's identity – how they think and conceive of

themselves and their surroundings – becomes important. Identity impacts one’s formation of values, and one’s values impact one’s outlooks (Kollmuss & Agyeman, 2002). Therefore, the concepts of place identity and place attachment are very closely linked to the development of pro-environmental outlooks. Additionally, place attachment has been positively linked to pro-environmental behaviours in multiple studies (Carrus, et al., 2013; Kollmuss & Agyeman, 2002; Mayer & Frantz, 2004; Rogan, et al., 2005; Chawla, 1999; Hinds & Sparks, 2008). This thesis will discuss and expand on the intersection of place attachment and pro-environmental behaviour, and furthermore, will aim to introduce the idea that theoretical interconnectedness perspectives can be useful in furthering the positive connection between place attachment and pro-environmental behaviour. Moreover, this thesis will focus on so-called ‘Western’ people in order to add another interesting facet to the conversation and to show that perhaps the West is not lost to pursuing a destructive environmental path.

In order to do this, it is worth giving a brief overview of what I mean by the term ‘Western’. Definitions of the ‘West’ are contested and complex, and it is by no means a perfect term. However it is recognisable and well used in academia, and thus it serves to delineate (as much as anyone can) a particular sample of the world population. The term is sometimes interchanged with the ‘global north’, or the ‘minority world’ (Humphery, 2010), and in doing so includes not only parts of Europe and North America, but also countries such as Japan and Australia. While these countries may not be western in their geographical positioning, they do possess certain qualities which, for the purposes of this thesis, will allow them to be included in the term. Generally then, being ‘Western’ includes notions of modernity, a reliance on technology, codified political rights, freedom and liberty as human rights, a high level of economic development, a belief in rationalism and science, high levels of mobility in both vehicles and aircraft, and access to the global market (Brown, 2011; Humphery, 2010). Therefore practices of Westerners could include activities such as: “a daily shower, the school run, foreign holidays, climate control, dining out, global friendships...the weekly shop and so on” (Urry, 2013, p. 340), which have spread in recent years alongside the expansion of consumption and high-carbon lifestyles. Of course it is necessary and important to recognise that occasionally rejections of certain aspects of the generalised Western lifestyle occur from within it, for example in the form of leftist-liberal, environmentalist, and post-materialist attitudes (Humphery, 2010). These have arguably been increasing in prominence in response to issues of climate change and environmental degradation (*ibid*).

This thesis therefore acts within the West, and with a majority-Western sample, to demonstrate the potential that a connection between place attachment and pro-environmental behaviour has for

dealing with some of the problems faced by humans in the environment today. To do so, both primary and secondary data will be used. The primary data will exemplify the opinions of a majority-Western sample, in order to shed light on the potential that this sample has for acting pro-environmentally. This should highlight some concepts raised and studied in the secondary data and therefore, when put together, the primary and secondary data should generate a useful contribution to the field of human ecology.

Aim of Thesis

In order to propose that there is an opportunity to use place attachment and interconnectedness to encourage pro-environmental behaviours, I will be combining an array of literature on the concepts of place attachment, place identity, interconnectedness, and pro-environmental outlooks and behaviour with my own primary research to suggest a positive future – and present – for the earth. Pro-environmental behaviour is defined as “behavior that consciously seeks to minimize the negative impact of one’s actions on the natural and built world” and includes actions like reducing energy use, toxic-substance use, and waste (Kollmuss & Agyeman, 2002, p. 240). This thesis will explore the idea of pro-environmental behaviour being encouraged by place attachment, and the usefulness of an interconnectedness perspective for viewing and expanding these connections. It will do so by using mainly secondary literature supported by primary data which will act as supporting and augmenting information and thus reinforce the empirical results and theories already found in the secondary literature.

The primary research consists of data gathered in an online survey I conducted, with responses from 85 participants residing in a variety of mostly Western countries. As mentioned above, secondary literature and data from a variety of academic fields alongside my own research will be used with the aim of creating a cohesive discussion of the importance of place attachment and interconnectedness in facilitating pro-environmental responses to environmental challenges like climate change. Place attachment has been discussed in a variety of ways in a variety of academic fields which often have no contact with each other. I will therefore aim to incorporate ideas from these multiple fields, and consequently generate as comprehensive a contribution to the topic as possible. The resulting amalgamation of place attachment concepts with pro-environmental behaviour, through an interconnectedness perspective, and especially in relation to a mostly Western sample, should thus be a relatively unique combination which aims to collate information from a variety of disciplines to create a fresh and interesting discussion.

Research Questions

1. What is place attachment, and is it still visible and important in the lives of those living in the so-called ‘West’?

2. Is there a connection between place attachment and pro-environmental behaviour, and if so, how can it be expanded via an interconnectedness perspective?

Structure of Thesis

I will begin by introducing and defining the key concepts of place, place attachment, place identity, and interconnectedness. These will form the theoretical framework on which the basis of this thesis is formed. The ideas introduced in this initial section will be further discussed as the thesis continues. The very concepts of place attachment and interconnectedness are theoretical in nature and therefore the entire thesis has theory as a consistent theme and backdrop. Additionally however, specific theories will also be employed as and when they are applicable to the discussion. Hence the theoretical framework and key concepts section will aim to give simply an adequate description of each concept in order to allow the reader to be capable of understanding them within the thesis discussion as it progresses.

After the theoretical framework and key concepts section I move on to discuss my own positionality through a brief explanation of my background and the reasons for pursuing this research. Next, I proceed to discuss my methods, both primary and secondary, along with their strengths and limitations. Following the methods section I will begin my thesis discussion in full, where the bulk of my evaluations and arguments lie, and where my primary data will be incorporated and analysed alongside the crucial secondary literature. As I discuss a web of connected concepts including place attachment, place identity, modernity, globalisation, interconnectedness, and pro-environmental outlooks and behaviour, my thesis discussion will aim to flow as an ongoing and integrated text.

I then complete this thesis with a conclusion and summary of my findings, a review of the strengths and limitations of my work, and thoughts concerning the future of research into this topic.

Defining the Key Concepts of the Theoretical Framework

The theoretical framework for this thesis is comprised of the concepts of: place, place attachment, place identity, and theoretical interconnectedness perspectives. Together these concepts act as the lens with which to read this thesis, and they simultaneously act as a large part of this thesis itself as they are furthered discussed and explored as it continues. This section therefore defines the above concepts so they may be used as my theoretical framework. However the importance of these concepts does not end with this section, as they are of ongoing importance throughout the thesis and will continue to be used and discussed as it progresses. Together therefore, these concepts will continue to function throughout the thesis to help illustrate the possible connection between people

and place, and the influence that this connection may have on pro-environmental behaviour, with particular attention to the West.

Place

Place as a concept has a myriad of complex definitions. The Oxford Dictionary defines place as “a particular position, point, or area in space; a location” (Oxford Dictionaries, 2016). Traditionally in academia authors such as Relph conceptualised place as a bounded entity (Castree, 2009; Lewicka, 2011). These definitions of place as bounded were therefore once the norm in geography and other social sciences. However with the advent of globalisation, discourse about place in the social sciences shifted, and so did the definition of place. This has led to geography and other disciplines now recognising the “openness of places” (Castree, 2009, p. 161) instead of their boundedness. Consequently place is now conceptualised as being open, boundless, fluid, and connected, but still capable of being defined and recognised by those experiencing it (Escobar, 2001). The word ‘particular’ in the Oxford Dictionary definition above should therefore not be confused with bounded. Particular should be considered in the sense that one recognises one’s surroundings and creates place in the very experience of existence, as we are always ‘in’ a place. Therefore a ‘particular location’ does not necessarily mean that these particularities are static or bounded. Place in fact should be considered “absolutely not static” (Massey, 1991, p. 29).

Hence, discussions about place now recognise that many people travel and move in a mobile and globalised world, and in doing so, they experience and generate knowledge about a plethora of places in their lifetimes – all of which have formative impacts on their identities and sense of self (Castree, 2009). In this way, the social science discourse now recognises that despite globalisation and modernity, ‘place’ is still a very important concept, and one whose importance may in fact be increasing in relevance in fields such as anthropology, geography, political ecology, and psychology (Lewicka, 2011; Escobar, 2001). This visible increase in the discussion on the importance of place and place attachment is arguably occurring in conjunction with an increase in interest in conservation and environmental issues, which concentrate on the connection between people and the places that shape and are shaped by them (Adger, et al., 2011; Lewicka, 2011). Therefore, as Castree notes, “places are not what they used to be...but place still undoubtedly exists” (2009, p. 161) and places are now “inextricably connected” (*ibid*) despite their diversity and uniqueness. Hence, the ideas of place and place attachment in a connected world are vital to the discussion on the environment and the challenges we currently face as part of it.

It is important to note also that alongside this increasingly evident connectedness of places due to globalisation, places are also importantly tied to our sense of self through what is called ‘place

identity' (Lewicka, 2011). Malpas summarises the connection between place and identity in writing: "it is through our engagement with place that our own human being is made real, but it is also through our engagement that place takes on a sense and significance of its own" (2009, p. 33 in Seamon, 2015, p. 392). Place identity therefore forms an integral part of place attachment and is henceforth important to consider as part of a connection to place which may help forge pro-environmental behaviours. It will therefore be further explained and expanded on anon.

If place is then not only a particular physical location but also something which impacts our sense of self as people, place can be conceptualised as a meaningful location with both physical and social features (Lewicka, 2011). For example, a person may recognise or feel attachment to place because of *social* aspects such as religious connotations, social relationships, history and ancestry; and/or feel a sense of attachment because of *physical* aspects such as recreational space, the ability to rest or relax, or the attractiveness of physical features (Lewicka, 2011). Feeling attachment to place on both a social and physical level should therefore not always be thought of as attachment on two entirely discrete levels, nor can a person only feel attachment at one level, but the combination of both dimensions exists and can effect a person's connection to place in multiple ways (*ibid*).

Place also differs in terms of scale. This thesis will discuss place on both a local and a global scale. In doing so, it is not to postulate that one is above the other in importance, but to discuss place in an open and interconnected way, whereby local places connect to global ones. It is also important to recognise that a local place is not limited to a place of origin. That is to say, the scale of 'local' can apply anywhere on earth, not just where someone was born or grew up. Ingold (2000) defines local as being experienced differently to the global, whereby the local deals with a practical, perceptual, and experiential involvement, and the global deals with a more detached and alienated conceptualisation. Therefore, conceptualisations of place can exist on a small/local scale: a person's visible surroundings; and also on a large/global scale: conceptualising the globe as a 'place' in which we all exist, despite not being able to physically see it all at once. Thus, in line with Ingold (2000), it could be said that the local is experienced and the global is imagined. This does not negate the importance of either scale, nor does it mean a person can only think of place in one of these ways at a time. And, as aforementioned, places are not bounded, but can be "imagined as articulated moments in a network of social relations" (Massey, 1991, p. 29) and experiences. Therefore we are always in situ, in a myriad of local places, boundless and without end and all interconnected across scales.

Thus, it can be useful to consider the globe as a series of interconnected local places – each with people in them experiencing life first-hand, whilst being capable of conceptualising others in their

own local places, making up the globe as a whole. Therefore, people are able to view themselves as part of their local places through their experiences, but are also able to recognise that countless other places exist around the globe – each with people experiencing them, and each available on a local scale to those who travel to them. Thus, people are always in both a local and a global place because they are interconnected, and people can travel *between* multiple *local* places in the *globe*. This understanding of the links between one local place and other local places around the world is certainly possible in the age of technology, travel, and modernity. Henceforth, places become pinpoints of social relations between people, a “meeting place” or “intersection”, without boundaries, which leads to a ‘consciousness of place’ in the minds of people as they conceptualise its “links with the wider world” in order to integrate “in a positive way the global and the local” (Massey, 1991, p. 27). The connection between place in this way is what Massey (1991) identifies as “a global sense of the local, a global sense of place” (p. 29). This is what I mean when I use the terms local and global in this thesis.

The theoretical concept of ‘place’ is thus essential for this thesis, as are its associated concepts of local and global scales. Understanding place as an open concept, both experienced and imagined, is necessary to help fathom concepts of place attachment and place identity. Furthermore, in order to conceptualise interconnectedness perspectives, we must first understand place to see how places interconnect across scales and locations. Hence, ‘place’ is a fundamental aspect of the theoretical framework here, and is embedded in this thesis as it continues.

Place Attachment

Place attachment, like place, is not a simple term. That is however what makes it interesting, and what makes it a potentially useful concept to discuss as a part of a process for dealing with issues of climate change and environmental degradation. Place attachment arguably elucidates the possibility of being a complex (albeit partial) solution to a complex set of problems.

Like place itself then, place attachment has a myriad of meanings from a plethora of academic fields, and it can be interpreted differently by every person who experiences it (Carrus, et al., 2013; Göksenin & Finch, 2004). Furthermore, it is not always identifiable until pointed out; that is to say people can experience place attachment without being aware of it (Göksenin & Finch, 2004). Therefore, “attachment to place grows by stealth, by which mere words and thoughts give way to something deeper” (Orr, 2011, p. 223). However, as the phrase suggests, place attachment is generally understood as a set of emotional or affective ‘bonds’ that occur between people (as individuals or as groups) and a place (Carrus, et al., 2013; Walter, et al., 2015). As aforementioned,

this bond between people and place can form in relation to both physical and social aspects of place (Carrus, et al., 2013; Lewicka, 2011).

In the field of psychology of place, place attachment is viewed as comprising of three aspects: attachment, familiarity, and identity (Göksenin & Finch, 2004; Fullilove, 1996). These factors lead to the creation of bonds, links or connections between people and their surroundings. 'Attachment' is formed via an emotional or affective connection to place (*ibid*). 'Familiarity' occurs through a person's cognitive mapping of a place, where their experience of a place is translated into knowledge about it (Göksenin & Finch, 2004; Fullilove, 1996), and 'place identity' will be explained in the section devoted to it anon.

It is useful to consider that place attachment can also connect people to place via memory and imagination (Göksenin & Finch, 2004), and it is therefore not an easily quantifiable subject and cannot easily be discussed in a rationalist and scientific manner (Lewicka, 2011). It rests more comfortably in the realms of emotion, sense and feeling. It is generally accepted that place attachment, for the most part, is felt in association with places within which an individual or group has personal experience (*ibid*). Indeed direct experience does tend to have a bigger impact on a person's behaviour than indirect experience (Kollmuss & Agyeman, 2002). There is some suggestion that one can feel place attachment to imagined or fictional locations as well as ones in which a person has personal experience (Buell, 2005). For the most part however, it is experience in a location, or a person's "pattern of reactions" (Göksenin & Finch, 2004, p. 123) that are practiced via being-in-place which becomes the most formative aspect of a sense of belonging, connectedness, and attachment to place (*ibid*). Place itself therefore becomes defined by the individual or group who is creating it as a 'meaningful location' via their experience of it (Lewicka, 2011). The experiential embodied aspect of place is therefore an important aspect of place attachment.

Essentially, "physical places acquire meaning through personal and group memories, religious and national symbols and through the multi-sensory feelings experienced when being-in-the-place" (Lewicka, 2011, p. 221). This meaning transforms into – and is representative of – place attachment. And therefore, place attachment is crucial to the theoretical framework here, as it is a key concept in this thesis. Defining what place attachment means is necessary then, so that discussion can follow about whether place attachment is still present in the West, and if it can possibly be positively related to the generation of pro-environmental behaviour.

Place Identity

Place Identity is a concept which is fairly inextricable from place attachment. As mentioned above, identity forms one of the three factors of place attachment recognised in the psychology of place

(Göksenin & Finch, 2004; Fullilove, 1996). Place identity as a concept was developed initially by Proshansky in environmental psychology, but was soon taken on by others as well (Fullilove, 1996; Hinds & Sparks, 2008). It deals with the “extraction of a sense of self based on the places in which one passes one’s life” (*ibid*, p. 1516). In this way the place becomes ‘part’ of a person and is shaped by and with them, as it shapes them in return (Seamon, 2015). Therefore, “people shape places and places shape people” (Day, 2003, p. 149). Having a ‘sense of place’ is then seen as instrumental to a person’s self-identity (Fullilove, 1996).

Place identity is a facet of place attachment which may take a long time to develop. Whereas attachment to place (especially to physical aspects of it) can form relatively quickly, place identity often takes more time to develop (Lewicka, 2011). Place identity, like place attachment, is not limited to the individual, but can be experienced by groups of people or communities, indeed “the permanence of places in the landscape coupled with stories told that invoke them provides a means to perpetuate a cultural identity” (Harvey, 1996, p. 305). As such, places become essential aspects of human existence so that, as aforementioned: “there is no place without self, and no self without place” (Casey, 2001, p. 406 in Devine-Wright, 2013b, p. 62).

The significance of place identity has arguably not been fully realised and is only recently being recognised for its importance (Hinds & Sparks, 2008). Because it is closely tied into the concept of ‘environmental identity’ – which has been proven to have an impact on environmental attitudes and behaviour (Stets & Biga, 2003, in Hinds & Sparks, 2008) – I believe place identity, in conjunction with place attachment and interconnectedness, is vital when considering how people relate to their surroundings in a way which may create beneficial environmental behaviour. Hence it is one of the key concepts of the theoretical framework because it supplements, and is part of, place attachment. Therefore it will be used in this thesis as an aspect of place attachment which can possibly influence the encouragement of pro-environmental behaviours within the West.

Interconnectedness

“You are not separate from the whole. You are one with the sun, the earth, the air. You don’t have a life. You are life.”

– Eckhart Tolle

Many authors have noted a separation between culture and nature, or humans and the environment, in modern Western rationalist culture (Clayton, 2013; Ingold, 2000; Plumwood, 2002). It is through this disconnection between ourselves and our surroundings that these authors believe people are ignoring “much of what goes on in the world” (Clayton, 2013, p. 211) via a “lack of attention and awareness” (*ibid*) through the mental separation of ourselves from our surroundings.

Furthermore, it is this separation that some argue has led to detrimental impacts on the state of environment (Beery, et al., 2015; Plumwood, 2002).

However, this dichotomy is arguably a false one. Many authors are instead choosing to re-think the dualisms of nature and culture and instead focus on an interconnected perspective. This is described as: the dwelling perspective (Ingold, 2000), the environmental connectedness perspective (Beery, et al., 2015), and the new environmental paradigm (Schultz, 2000). Regardless of its title, ultimately the focus of this perspective is on an inextricable link between humans and environment – between people and place. In this way, “everything is connected: we can’t draw a line between the human domain and the natural domain...urban ecosystems are still ecosystems, and humans are still animals. Threats to one will affect the rest” (Clayton, 2013, p. 213). As in place attachment and place identity, where places are recognised as coming-into-being via the people who exist within them, the interconnectedness perspective is one where all things are considered to be becoming and re-becoming in the world. This means that “the environment is never complete” (Ingold, 2000, p. 20), and “the world continually comes into being around the inhabitant” (*ibid*, p. 153). This is not however by any means an attempt to create an egocentric perspective of the world. It is a way of recognising that the world can only be interpreted and experienced via the person or thing doing the experiencing, and that all things shape and are shaped by each other. It is therefore “a perspective that treats the immersion of the organism-person in an environment or lifeworld as an inescapable condition of existence” (Ingold, 2000, p. 153), meaning there is no separation of human from environment. It is recognition that all life is made from, and in, its surroundings, and therefore there is no way to separate life from those surroundings (Morton, 2010). We are therefore not ‘on’ but ‘in’ the earth (Ingold, 2000).

Therefore, an interconnectedness perspective not only dissolves the separation of people and environment, but dissolves many boundaries, so that all things can be considered connected to each other: “when life...has begun, we find ourselves unable to draw a thin, rigid line around it” but it instead becomes a “limitless system” in “constant flux” (Morton, 2010, pp. 9-15). This is to say that life, and the environment, has no boundaries, indeed “the universe is messy...nonlinear...dynamic...and evol[ing]” (Meadows, 2009, p. 181). It therefore does not begin or end, but is constantly made and remade without end. This goes against those traditional conceptualisations of place as a bounded entity, and instead suggests that place is part of an ever-changing and evolving environment, without ‘edges’ or exact boundaries.

Henceforth, the concept of interconnectedness becomes a way to “replace the stale dichotomy of nature and culture with the dynamic synergy of organism and environment, in order to regain

ecology of life” (Ingold, 2000, p. 16). The perspective of interconnectedness is therefore implicit and interwoven within place attachment, as it is interwoven in all things and in all existence. It consequently becomes crucial as a part of the theoretical framework for this thesis, alongside the theoretical concepts of place itself, place attachment, and place identity.

Positionality

Alberta

those blue skies
that swallow me up
and spit me out to fly.
those trees that sway
when I sit up them so high,
and the thunder that cracks
when the storm rolls in.
and the flashes of light
that take over the stars
and break into the night.
where the street lights lie
in stripes on my floor,
and the days float by
with dancing dust
in summer rays
of years gone by.

- E. Kozowyk

This section is mainly anecdotal, but I believe that – in line with Haraway (1988) and others – admitting and revealing my positionality and ‘situatedness’ is very important as it helps the reader understand the potential biases I may hold and admits to the ever-present subjectivity with which all research is done (Caplan, 2014). Our experiences and emotions shape us, and being aware of this is crucially important as they likewise shape the way we produce and reproduce knowledge (Wright, 2012). This is especially salient with a topic such as place attachment because it is so complex and easily interpreted in a variety of ways. With this in mind, the following section aims to portray my position, my experiences, and my emotions, from which and by which this thesis is indubitably shaped.

The concept of a sense of belonging, attachment to place in particular and – in particular – to particular places, is something that has been in my mind for the past decade. At age 14 I moved from my first home in Calgary, Alberta, to a new home in a small village in the rural countryside of Dorset, England. It was not complete culture shock due to my dual Canadian-British citizenship and frequent visits to the UK. I therefore had some knowledge of the ways of British life and the ‘lay of the land’. I had even visited the place we now live before we moved, having spent some time learning its nooks and crannies as a 12 year old visitor. But, I was unprepared for the sense of loss. I am still frequently plagued by vivid dreams and ongoing reflections about my sense of place, sense of belonging and above all, my never-ceasing *attachment* to particular places in Calgary. This is a phenomenon felt by others. David Orr similarly wrote: “I have lived in 9 places in my life, but I dream about only one” (2011, p. 213).

For me then, a sense of place in Canada always begins from my house, and in particular from my bedroom. When thinking about it in my mind’s eye, my sense of attachment begins with the carpet of my bedroom floor, and then the image fans out – through the cubby in my closet, out the door and down the brown carpeted stairs, into the hallways and rooms of the yellow house, into the backyard, up and down the trees with treehouses built by young hands in hardy boughs, along the fence we used to walk along the top of, past the corrugated iron I have scars on my knees from, and into the alleyways, the cul-de-sac and the neighbourhood as a whole. Here my mental image continues as I remember the feeling of my bare feet sprinting down the sidewalk to the corner post, and my mind picks up speed as it floats onwards down the gravelled alleyways to my elementary school, the wooden playground built by neighbourhood hands, and through the nature reserve, and the Native American reservation, out to the open fields, through the prairies and along the miles of road stretching into the Rocky Mountains.

My ‘sense of place’ and sense of self are inevitably tied to these thoughts, memories, and places. Many, but not all, of these ‘markers’ still exist and I have returned to. Some, like the Rocky Mountains, are not specific in that I do not have particular mountains that I am attached to, but nevertheless the sight of the mountains instils relief whenever I return. Indeed, research into attachment to types of place as well as to specific places has shown that people are capable of forming both these kinds of attachment (Feldman, 1990, in Lewicka, 2011). My own attachment to types of place, like mountains and open plains, is something I therefore recognise as part my own identity, alongside my attachment to specific places like houses, schools, recreational spaces, etc. All of these places – whether memories, specific locations, or types of place – play an undeniable role in my identity and my sense of self. Interestingly, returning to formative life places is a topic discussed by Stanger (2014), whose PhD found that in taking people back to places which were

important to them during their upbringing, they – like myself – recognised the importance of these places in contributing to their identity, values, and beliefs. This is interesting because our identity, values and beliefs all impact our behaviour and action. Indeed, authors Orr (2011) and Kingsnorth (2012) suggest that experience in place was crucial to the initial development of the environmental movement. Orr (2011) further adds that even environmentalists who write specifically on global environmental impacts are still “shaped early on by a relation to a specific place” (p. 152). In forming these attachments, Stanger further suggests that it is important to pay attention to our attachment to these places so that “not only will our human lives be better, but we will live better on the planet” (Stanger, 2014, p. 149) by recognising our place in place, and by seeing those places as important and connected.

In line with Stanger’s findings, my own interest in the topics of place attachment and place identity can be clearly traced through my personal experiences in place. My identity formation is therefore not limited to formative locations in Calgary, but the creation of place identity can also be traced via my many experiences in places elsewhere in the world. Indeed, I tend to conceive of my now increasingly ‘global’ identity as not diminishing my attachment to those initial formative places. Crucially then, my sense of place does not end with places in Calgary. Since moving, there are many places in different countries which hold meaning, and many which have contributed to who I am. The word ‘*home*’ has since been tattooed on me as a multi-purpose marker of my sense of self, sense of place, and a constant reminder to myself that I can be at ‘home’ in many places – not just in the first home I left behind. Moving, travelling, and living in multiple places has therefore led to what is possibly a better appreciation of the importance of place to me, and the ability to maintain attachment and create it in new locations repeatedly. Movement has also contributed to what I feel is a sense of local place, *and* a sense of global place, without either diminishing the strength of the other. Gustafson (2009, in Lewicka, 2011) recognised this, with research which found that frequent-travellers and mobile people did not necessarily lose their sense of place at a local scale, or to their places of origin, but were capable of also generating a bond at a global scale. As I have found in my own life, Gustafson’s work found that the generation of global attachment did not reduce attachment to local places (*ibid*). Personally, I find this a fundamental finding, and one which will be returned to later in the discussion on whether place attachment, across interconnected scales, is still present in the West, as I have found it to be in my own Western life.

Overall in this positionality section I have tried to recognise my own positionality and biases, as well as to explain my own affective and emotional bonds to place. This is because, as aforementioned, place attachment is not something that is easily discussed in a rational and wholly quantifiable manner, but which requires recognition of affect and emotion. Because our own lives are impossible

to completely extricate from our research, we are a part of the research we produce (Stanger, 2014). I have used this section to recognise this, and to open the discussion on place attachment. My own formative life places and background are very much part of the reason I have studied place attachment in connection to pro-environmental tendencies, but also frame my investigation into other Westerner's formative attachment to place and pro-environmental tendencies. It is therefore from these perspectives, and this standpoint, that I view and write my work here. And it is from here that I am able to begin to envision the possibilities other people with a similar multi-place and multi-scalar attachment to place (even in a globalised and modernised world) have for living life in a meaningful and environmentally conscious way – in order to deal with the ongoing challenges that face us in our planet today and in the future.

Methods

Primary Research

For my primary research I created an online survey comprised of twenty-eight questions focussed around concepts of place attachment, belonging and movement. The survey was answered by 85 respondents from a variety of countries. It must be acknowledged – and indeed it is interesting to note – that the survey was disseminated only online, mainly via Facebook. In a style akin to Rogan et al. (2005), my sample was not meant to be representative of the world population, but rather aims to present the narratives and ideologies representative of a certain section of the population. My survey sample is also limited to people who: a) have internet access, and b) are known to me, or c) are known to people who know me, because the survey could be 'shared' online. This means that the survey was *mainly* answered by people who we can call 'Western'. Indeed, 62% of the sample was born in Europe and a further 28% was born in Australia, North America and Japan, therefore 90+% of the sample is from what would be called Western or lead Western lifestyles. Furthermore, a very high majority of 97.6% (83 out of the 85 respondents) are currently living in countries which would be deemed the West. Indeed, the top four countries from which respondents answered the survey were the UK, Canada, Australia, and Sweden respectively. Together, these four countries alone were representative of 79.8% of the survey respondents' current locations. 85.9% of respondents also said that 'white/Caucasian' was the ethnicity that best described them. They are also *mainly* of a similar age to myself (see Figure 1, p. 19) and therefore are of a generation with high levels of access to travel and technology. There was also a portion of the respondents who were residing in places which differed to those in which they were born (see Figure 2, p. 20), which shows a degree of mobility. Furthermore, because the survey was initially and *mainly* disseminated by me I know it was shared with people who completed University-level qualifications in Durham, UK; Perth,

Australia; and Lund, Sweden; it can thus be extrapolated that the respondents *frequently* have a relatively high standard of education. However, the level of one’s education is not a question on the survey, so it must be kept in mind that this is an assumption on my part, given the respondents I had.¹

Regardless, the above features of my results demonstrate a sample of which the majority are: Western, Caucasian, mobile, likely well educated, 21-30 years old, with good access to information and communication technologies. These features of my sample are interesting to note because they mean my survey sample is of the type of modernised, globalised, Western citizens that many authors suspect of being ‘placeless’ because of our ability to travel and our amount of time spent using technology, and being indoors (Mayer & Frantz, 2004; Orr, 2011; Lewicka, 2011). Whether this is the case will be discussed later. The important thing is to recognise the limitations and strengths of the sample – it is not a general sample of the world and should not be taken as such, but it is an interesting sample of a particular set of people, which will give insights that can be applied to the concept of place attachment and pro-environmental tendencies in the Western world.

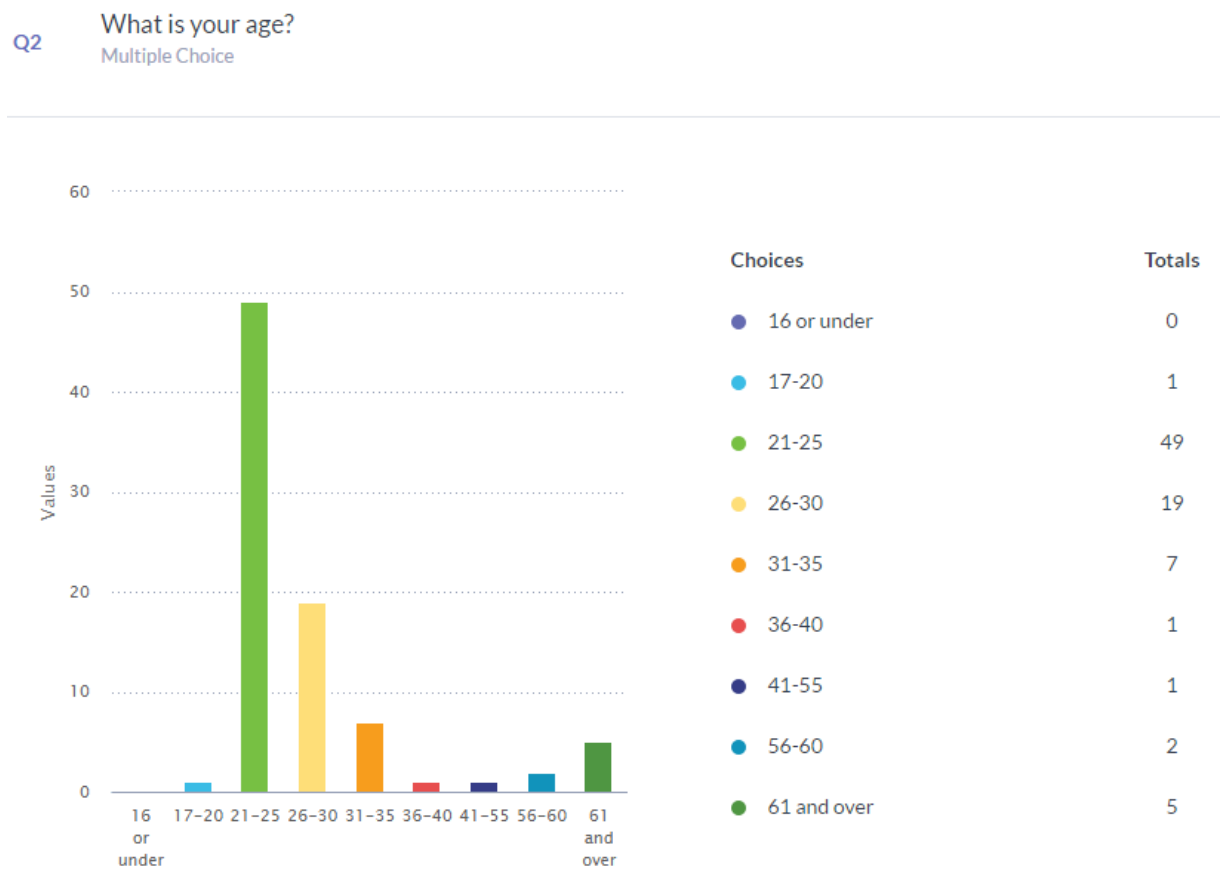


Figure 1: Respondent's Age: 80% of respondents are between the ages of 21 and 30.

¹ Respondents could choose whether or not to remain anonymous to me, and often they did not. In these cases I was able to recognise respondents and therefore make these judgements, however respondents will be kept anonymous in this thesis.

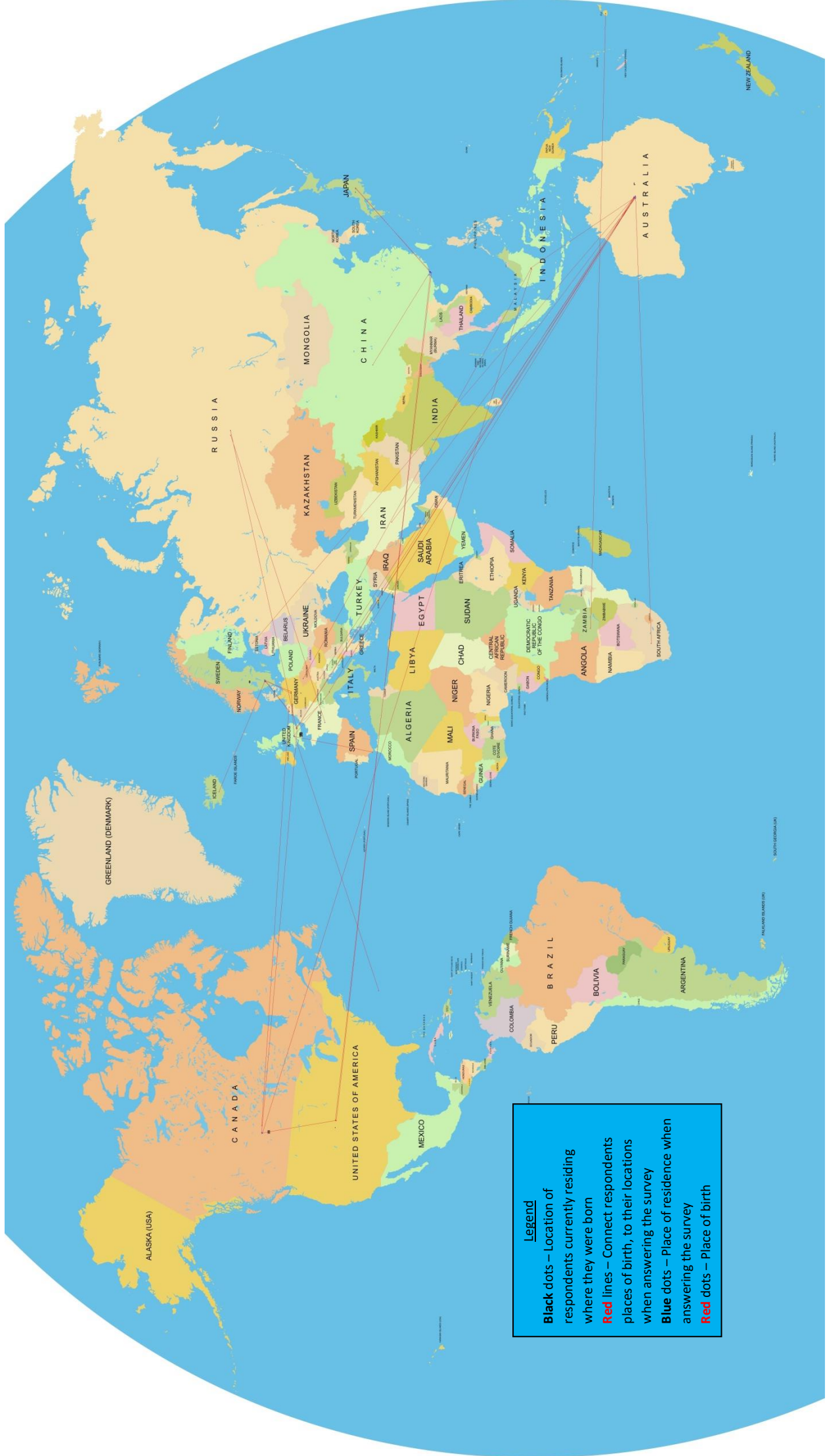


Figure 2: Map of survey participants' locations at time of response, compared to country of birth. Original map: Graphics Factory (2009).

Secondary Research

My secondary research is comprised of literature from a variety of academic fields, and is therefore a multi-disciplinary combination of dialogues surrounding place attachment, place identity, interconnectedness, pro-environmental behaviour and associated concepts. This is in part because this thesis is for an interdisciplinary degree program and therefore I felt the addition of multiple disciplines to my research would be beneficial and justifiable. Furthermore, I use a large amount of secondary literature from multiple disciplines because place attachment and pro-environmental behaviour – viewed via the lens of interconnectedness – innately involve multiple disciplines. Ideas of place began in geography, but have quickly been picked up by other disciplines in the social sciences, including political ecology, environmental studies, behavioural studies, anthropology, psychology etc. Therefore I felt it would be beneficial to draw from these multiple sources of information to collate a collection of ideas and concepts here. Furthermore, because I draw a connection between interconnectedness, place attachment, and pro-environmental behaviour, I had to deal with multiple sources of secondary research in order to build a theoretical framework to view my data, and data to view it via.

There is a plethora of information about topics of place, the environment, and interconnectedness perspectives, and I therefore felt it would be beneficial for me to try and combine these sometimes discrete concepts with one another in order to create a relatively fresh outlook on the connection between place attachment and pro-environmental behaviour, with a theoretical framework to support it.

Therefore, this thesis deals with environmental discourses such as work by Devine-Wright (2011, 2013) and Horlings (2015) and with environmental criticism, such as Buell (2005) and Kingsnorth (2012). It deals with environmental (and other) psychology, drawing frequently from data produced in studies published in journals of psychology (eg. Fullilove, 1996; Walter, et al., 2015). It deals with geography because much of place studies has been, and will continue to be, discussed in this field. It deals with social concepts, which include empathy and affect in relation to the environment, such as with Schultz (2000) and others. Research for this thesis has also included forays into environmental planning, management, politics, economics, behavioural studies, ethics, education, cognitive studies, and phenomenology. The secondary research used includes empirical data from studies, as well as qualitative and theoretical data. It has therefore been instrumental to the creation of a wide bibliography of concepts related to both place attachment and pro-environmental behaviour, as well as to interconnectedness perspectives. This secondary research is therefore vital to my thesis and acts as the main source of information on which my thesis is built. This is because my primary research is a specific sample, and one which I argue is capable of augmenting the research done

across these disciplines, but is not a study which is supposed to act completely alone to prove the connection between place attachment and pro-environmental behaviour. In connection with the secondary data which has already drawn links between the two, however, it can be beneficial. Therefore my primary data will be used in conjunction with my secondary data to add to the research already done in the multiple fields aforementioned to create supporting evidence in order to suggest that the connection between place attachment and pro-environmental behaviour is conceivable – even in the West – and that it is worthwhile to continue researching as part of a working solution towards environmental problems such as climate change, especially via interconnectedness perspectives.

Findings and Discussion

As aforementioned, there has been a growing discourse about the threat of climate change since the famous Brundtland report (United Nations, 1987; Horlings, 2015). However, discussion about *what* (or more specifically *who*) climate change is threatening is a minefield for debate. Paul Kingsnorth for example would claim that climate change is viewed by mainstream environmentalism purely as a threat to the way in which (specifically rich) people – separate from the environment – would like to continue living their lives (Kingsnorth, 2012). Therefore, despite increasing recognition that climate change is a problem which needs facing, despite countless meetings and international agreements, and despite the still salient importance of the Brundtland report’s message, progress is slow (Beery, et al., 2015).

Furthermore the methods of dealing with negative impacts of climate change arguably currently revolve mostly around technological ‘fixes’; and more specifically only on how to make these technological fixes reduce carbon (Kingsnorth, 2012). Kingsnorth would argue that these technological fixes are in fact a method to continue ‘business as usual’, with the label of ‘sustainability’ (*ibid*). He further suggests that this allows people in the West to reformulate climate change as a problem which can be fixed purely through technology, without conceding on any of the current capitalist regimes or rationalist worldviews (2012). These technological fixes and other ‘band-aid’ solutions therefore arguably push emotional, affective and cognitive connections to our surrounding environment to the back of the agenda in discussions of a sustainable future (Kellert, 2010). This is in line with the aforementioned separation of humans and the environment – a mental dichotomy which allows people to function as if the environment is an external resource to be used by us, and not – as interconnectedness and place identity would suggest – a connected aspect of existence (Ingold, 2000; Plumwood, 2002). Therefore “despite an awareness of human behavioural implications with these enormous challenges, popular and scientific discourses still manage to

largely separate the natural and the cultural” (Beery, et al., 2015, p. 8838) with arguably disastrous environmental impacts (Plumwood, 2002). Furthermore, there is some acceptance of Heidegger’s claim that modernity, rationalism and technology are to blame for the loss of a sense of place or ‘rootedness’ in today’s world (Harvey, 1996).

Interestingly, in my survey 16.5% of respondents did *not* consider climate change to be ‘one of the biggest challenges faced by humanity today’. However, only 8.2% did *not* ‘personally try to behave/act in an environmentally-sustainable manner when possible’ (see Figure 3). Thus, apparently people try to behave environmentally-sustainably ‘where possible’ in a way that means they do not necessarily also have to see climate change as one of the biggest threats to their existence? Arguably these results could suggest an awareness of climate change (visible in a propensity to act environmentally), but not a willingness to concede that climate change is enough of a threat to consider *always* acting environmentally – but instead, to do so only ‘where [seemingly] possible’.

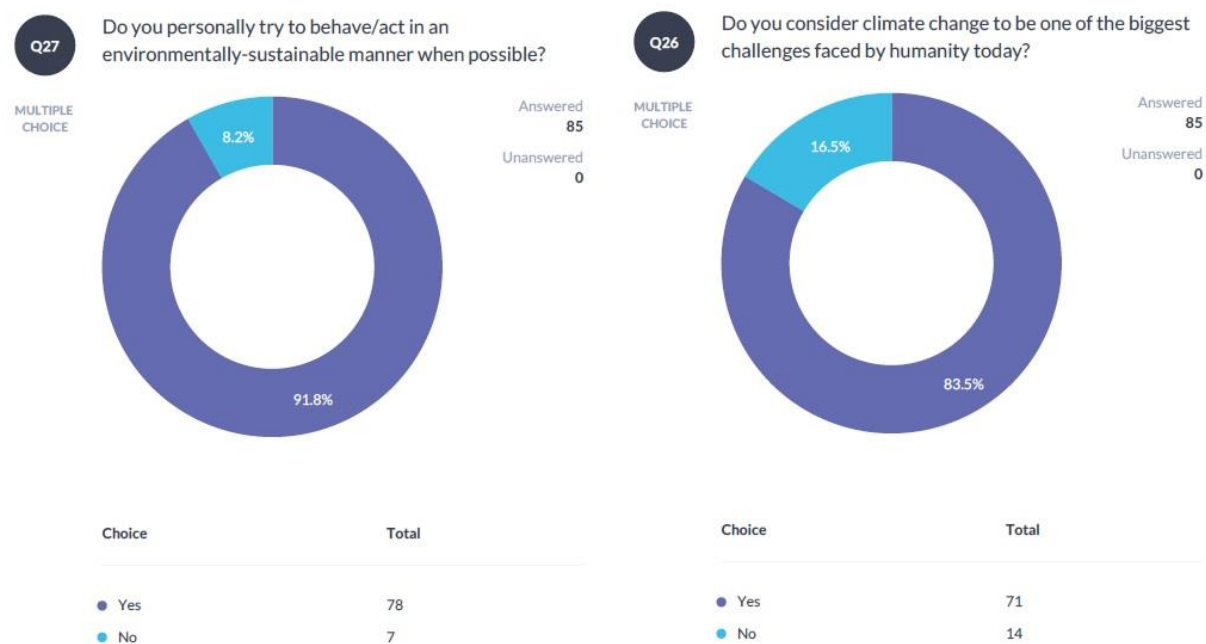


Figure 3: Pro-environmental behaviour compared to considering climate change as one of the biggest threats faced by humanity today

Perhaps the phrasing of ‘where possible’ allowed the respondents ignore or subdue certain aspects of their existence, and to see only particular aspects of environmental behaviour which were in-line with their Western lifestyles as ‘possible’. To exemplify this Festinger’s 1957 ‘theory of dissonance’ is useful, whereby “information that supports our existing values and mental frameworks is readily accepted whereas information that contradicts or undermines our beliefs is avoided or not perceived at all” (Kollmuss & Agyeman, 2002, p. 254). By applying this to the climate change crises,

we can presume that people tend avoid information about climate change if it poses a threat to particulars of their way of life – such as economic prosperity, material needs and a certain level of quality of life (*ibid*). Unfortunately, in order to keep my survey length manageable for the respondents, it did not go into detail about what respondents would classify as ‘sustainable’ behaviour. Furthermore, environmental sustainability is not solely about climate change. There are issues such as urbanisation, exploitation, and population growth which have vast impacts on the environment, and on an individual’s ability to be environmentally ‘sustainable’. And of course the very lifestyles which my study sample likely often partake in (such as carbon-producing means of travel and consumption) are impactful on the state of the environment. These types of behaviour could therefore be conceived of as not pro-environmental as they contribute to climate change because of their carbon output, and contribute to environmental problems in waste and other ways. There is then an interesting irony to consider within this research, because, as I will later expand on, the links between place attachment and pro-environmental behaviour have clear support. The findings here do not necessarily negate these links, but draw attention to the fact that there is a slight discrepancy between *how* people in the West are impacted by place attachment to create *which* pro-environmental behaviours, whilst perhaps not affecting other behaviours.

As my study did not specify *which* pro-environmental behaviours were being conducted by respondents, we can only assume that they were participating in some forms of pro-environmental behaviour where possible, despite potentially also contributing to negative ecological footprints in other behaviours. Thus, there is still an apparent gap between viewing climate change as one of the biggest challenges faced by humanity today (exacerbated by large carbon footprints) and a propensity to act environmentally. Perhaps people are behaving in *other* pro-environmental behaviours, but not necessarily concentrating on reducing their carbon-heavy travel or consumption. Or perhaps they are also doing what they see as ‘possible’ reductions to these as well, by carbon-offsetting their flights, biking to work, and buying locally? One respondent did mention that the questions in the survey were sometimes difficult for her to answer, because despite trying “to be eco-friendly...sometimes I just want to eat meat or I’m feeling too lazy to find a recycling bin” (Participant 28²). Clearly, more research into which behaviours participants do engage with could be beneficial here, but it is still interesting to note that despite sometimes behaving in non-pro-environmental ways, this participant still tried to be eco-friendly. A propensity for action is still present, if not always acted on. This makes this behaviour into ‘environmentally significant

² Quotes from respondents are taken from an optional section at the end of the survey, where participants were encouraged to make any further remarks or comments. Participants will hereafter be referred to as ‘P’ and the number which corresponds to them in my results - e.g. ‘P. 28’.

behaviour' (Stern, 2000) as behaviour which has the *intent* of being environmentally positive, but which may not always successfully occur.

As aforementioned then, the comparison between a viewing climate change as a major challenge facing humanity and a propensity to act pro-environmentally where possible is the only comparison that can be made from my data. It is still interesting to note, because climate change is a major environmental problem, and is therefore one issue (out of many) that could have been chosen for discussion in relation to environmental sustainability. Further research into why people feel a disconnection between climate change as a threat and environmentally sustainable behaviour would of course be fascinating and encouraged, following my findings here. Studies on the belief in, and opinion of, the threat of environmental problems other than just climate change, and the need to act pro-environmentally for the sake of those problems would likewise be interesting additions to this discussion.

However despite these considerations, the above contrast between viewing climate change as one of the biggest challenges faced by humanity, and a propensity to behave pro-environmentally is still an interesting phenomenon to recognise in my results. Similarly interesting are the findings of a study by Franzen (2004), where 53% of OECD-country respondents *disagreed* with the statement that "modern science will solve our environmental problems with little change to our way of life" (p. 302), compared to non-OECD countries. There is therefore some evidence of a change of opinion in the West, where people do recognise that rationalism and techno-fixes are not the only route to pro-environmental action, and that a change to 'our way of life' may also be required. This importantly contradicts what Plumwood (2002) and Kingsnorth (2012) have suggested, as discussed above – where the West is lost to a destructive path of rationalism and 'band-aid' techno-fixes. Indeed in the same study by Franzen (2004), more economically developed countries had higher levels of concern for the 'global condition of the environment' than lesser-developed ones. Furthermore, the combination of increased wealth and a high standard of living possibly acted to 'free up' resources to spend on solving environmental issues. This is reiterated by Torgler & Garcia-Valiñas (2007) who found that people were more willing to contribute money towards environmental protection if they were satisfied with their personal economic situation. Franzen (2004) furthermore found that a higher number of citizens in wealthy OECD countries (than non OECD) were in favour of choosing environmental protection over more economic growth (*ibid*). There is hope yet for the West, then.

As mentioned above, a study by Stern (2000) defines 'environmentally significant behaviour' as slightly different to pro-environmental behaviour, by defining it as behaviour which is "undertaken

with the intention to change (normally to benefit) the environment” (p. 408), with an emphasis on the *intent* to change behaviour, rather than on necessarily impactful behaviour. Arguably therefore, my survey is at the very least evidence of this intent with 91.8% of participants agreeing that they ‘try’ to act environmentally-responsible ‘where possible’.

Behaviour and lifestyles of the majority of Western citizens may still be environmentally damaging and contribute to anthropogenic climate change in various ways, but work like Franzen (2004), Torgler & Garcia-Valiñas (2007), and my own, help to support the argument that there are (possibly even an increasing number of) people in the West who are capable of forming pro-environmental attitudes and behaviours. A propensity to act sustainably ‘where possible’ in my own study, in addition to the secondary literature is at least supportive of a shift towards eco-friendly behaviour in the West. It is not a complete transition, but people in the West do at least possess the presence of *some* (if not all) pro-environmental tendencies. This is a promising start.

One inlet into the query about why people do not shift their behaviours to be more sustainable, or indeed view climate change as a threat to themselves as part of humanity, is found in the dichotomised world view discussed earlier. As part of the dichotomy between human and nature apparently prevalent in the West, there have been interesting observations made by some authors about the way in which people view the earth as a whole. One such observation is about how the globe is viewed in Western logic as a bounded entity *on* which we live, and the problems ‘it’ faces are not viewed necessarily as problems ‘we’ face (inclusive of us *in* the earth) (Ingold, 2000). In fact, the idea of the ‘globe’ in ‘global climate change’ is arguably conceptualised in a particular way; one that potentially alienates humans further from their place in earth as functioning organisms as part of an interconnected world-in-formation (*ibid*). This view ‘from above’ has been common practice since 1968 space explorations in the Apollo delivered photographs of the earth ‘from the outside’ (Clarke, 2013). The conceptualisation of the earth as a blue-green blob in a black abyss on which we humans reside as outsiders has led to the development of the idea that humans somehow have the ability to intervene and ‘fix earth’s problems’ – as if we ourselves were somehow separate from it in the first place (Ingold, 2000). But, the reality is that even from the Apollo, the whole earth cannot be seen at once (only half of the sphere is visible at a time) (Clarke, 2013). And, moreover, most people do not travel to space, and therefore – perhaps with the exception of views from airplane windows – we can only ‘see’ the earth at close quarters (*ibid*; Ingold, 2000). Therefore we also experience it at close quarters, and even when we are in a plane, we are still ‘in’ the earth and not ‘on it’: “it is always something we remain ‘inside’ and cannot genuinely perceive from elsewhere” (Clarke, 2013, p. 15).

Therefore some argue that a separation of humans from earth to this extent takes the human-nature dichotomy to new levels of alienation from our surroundings. And this god-like view from above (rather than from within) can be therefore be conceptualised as contributing to what Relph (1976, in Lewicka, 2011) would describe as 'placelessness'. Furthermore it elicits ideas of space travel, technology, and science, which – within Plumwood's concept of rationalism – lead us to see the earth as a resource and not as an intrinsic part of our existence (Plumwood, 2002). In this way, people have supposedly forgotten, ignored, or suppressed their place within the earth as a functioning environment, all interconnected in every way, to the extent that "modernization has rendered place-attachment nugatory and obsolete" (Buell, 2005, p. 64). Likewise this alienation is sometimes tied to a lack of pro-environmental behaviour or sustainability. Hulme for example suggests that "by constructing climate change as a global problem, one that is distanced and unsituated relative to an individual's mental world, we make it easy for citizens to verbalise superficial concern with the problem but a concern belied by little enthusiasm for behavioural change" (2008 p. 8, in Devine-Wright 2013b, p. 62). Again this elucidates the ability to alienate oneself from the globe in this way, and see it as just that – it – as opposed to 'us' (Ingold, 2000). Using the theory of dissonance it is possible to suggest that we humans distance ourselves from the consequences of climate change via this alienation. In doing so we tend to use methods of denial, defence, distancing, apathy, and delegation of blame in order to avoid personally responding to climate change problems (Kollmuss & Agyeman, 2002). This is what Hulme (2008) identifies, where the problems of the globe are too alienated and unsituated to be dealt with by individuals effectively (in Devine-Wright et al., 2015). Kingsnorth (2012) similarly laments the alienating way that the environmentalist discourse sometimes presents climate change and environmental challenges, which he argues lack 'specificity' and any real attachment to the planet on an experiential scale. Henceforth, the need for an increased sense of hope, rather than distressed distance, is necessary.

The ability to conceive of local places as part of a global network of an interconnected world-information is one such suggestion as a way to create a sense of hope rather than avoidance. Therefore one response to this issue can be found in the idea of interconnectedness. Behaviour is a complicated phenomenon to measure and to change and so generating pro-environmental behaviour is complex. However Stern (2000) does discuss the potential solution held in place attachment and interconnectedness in his discussion of a New Ecological Paradigm – akin to what I term interconnectedness – as one route towards creating environmentally significant behaviour. Within this paradigm is the belief that everything is connected, and that an emotional affinity towards your surroundings (specifically 'nature' in this case) is a positive contributor towards pro-environmental behaviour and intent (*ibid*).

This perspective can therefore be posited as a response to the above supposed alienation and placelessness. Since Relph's 1976 work the idea of 'placelessness' has been taken on in academia and popular culture as a problem connected not only to alienation on a global scale but to the increase of urbanity and subsequent decline of traditional communities (Lewicka, 2011). Within the concept of placelessness is the assumption that we no longer have the ability to feel a sense of place and that modernity, with its commodification and ease of travel, has "damaged our ability to be at home anymore" (Orr, 2011, p. 154). Or, as Harvey (1996) notes, that a solid understanding of your surroundings and of 'nature' "cannot be had on the run from one place to another" (p. 303).

However, I argue that although placelessness may, to some degree, be present in the Western countries, it is not as much of a problem as these authors would suggest. I therefore contest Harvey (1996), and show support for the idea that experiential understanding of and, importantly, attachment to place can and does still occur at multiple scales and to multiple places.

Therefore, in order to answer my first research question I aim to show that the potential for attachment to place still exists in a globalised world, and henceforth, the alienation causing what Hulme (2008 in Devine-Wright et al., 2015) identified as a lack of pro-environmental behavioural change, may be an issue that can be dealt with via an interconnected sense of place. For example as Stern (2000) and Clarke (2013) suggest, in opposition to the alienation caused by perceiving the earth from space as a separate identity to self is the idea that "the earth is not 'one' in the sense of an entity we can see, understand, or read as a whole" but rather "it is always something we remain 'inside' and cannot genuinely perceive from elsewhere" (Clarke, 2013, p. 15). Perhaps, with this in mind, belonging and its associated care for places of attachment can develop on a global-scale in order to view the world as a series of local *and* global places – in a functioning interconnected system, rather than as seeing it from 'above' or as 'outside'. This is what Jasanoff (2010) describes as "belonging and stewardship...on a planetary scale" (p. 241, in Devine-Wright 2013b, p. 62). I would extend this concept so that belonging on a 'planetary scale' does not mean a lack of local place attachment, but merely accepts that if all things are interconnected, local place attachment can *also* be global place attachment – as we are connected to all things equally in the process of being-in-the-world.

Furthermore, it is this type of interconnected, poly-local and poly-scalar place attachment which can be beneficial to the generation of pro-environmental outlooks and behaviour. Kellert (2010) notes that the suggestion that we are ever able to truly subdue our affective connection to place in favour of technological fixes and economic incentives in an attempt to deal with climate change effectively is actually "misguided...self-defeating folly" (p. 375). Therefore affective place attachment and

interconnectedness are every-day inescapable phenomena and can be beneficial to consider as part of a solution to environmental problems. Furthermore, place is evidently still important and recognised, even in a world full of techno-fixes and economic incentives.

My survey displays promising results for this still-present sense of place in our modernised, globalised world. For example, Figure 4 shows that the vast majority of respondents (95.3%) felt a sense of belonging in connection to specific places in which they have spent time. Considering the fact that most respondents are from a Western lifestyle, this is a sign that despite modernity, people are still making connections to specific places in earth and that these places constitute a 'sense of belonging'.

Clearly, 'placelessness' is not as much of an issue as Relph and others would suggest.

Interestingly, 72.9% of respondents have also spent 1+ months living in a country different to the one in which they were born. This is worth considering, because part of the argument for the placelessness epidemic is the increased mobility that globalisation and modernity bring. I would argue that my results indicate that spending 1+ months in a country different to one's country of birth does not equate to a loss of sense of belonging to particular places. I would like to further extrapolate that many respondents have travelled frequently, not just once for 1+ month, but as this question is not specifically asked in the survey it is merely an assumption based on my understanding of the participants in the study. However, another study by Gustafson (2009, in Lewicka, 2011) did what I could not, and confirmed that people who travelled often did not lose a sense of place, but instead felt a stronger bond to place at a larger scale. Furthermore, he crucially found evidence that this bond to place at a larger scale did not in any way decrease a person's

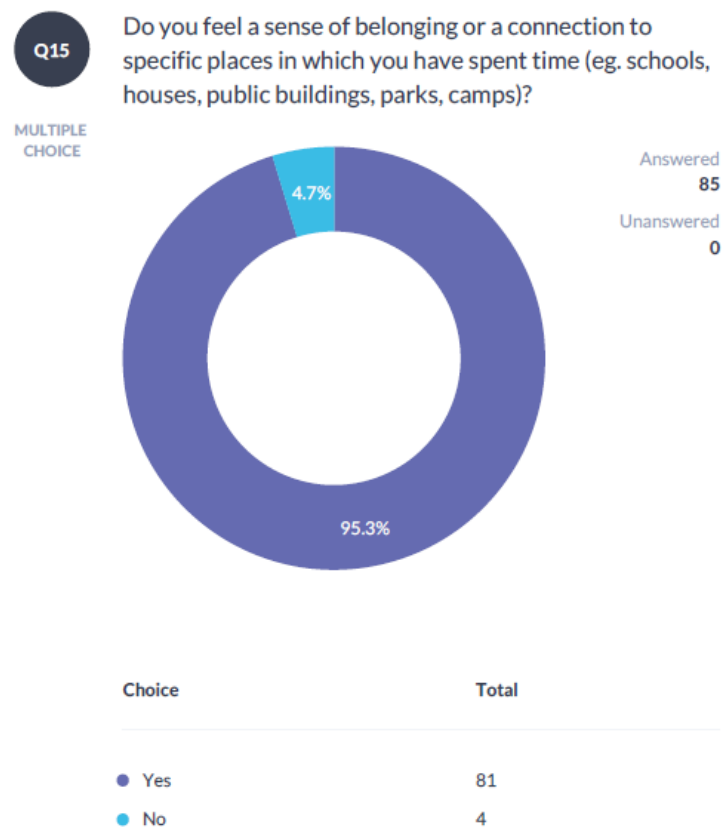


Figure 4: Connection to specific places

attachment to meaningful places of origin (Lewicka, 2011). This is a useful example of place attachment being strong, despite the impact of modernity and movement. Further support is provided by Graumann (1983, in Lewicka, 2011) who suggests that the norm for people in today's globalised world is to have multiple place identities. Buell (2005) further recognises that there is not merely one way to be an environmentalist, and Plumwood (2002) agrees that: "even the goal of place-conscious and place-sensitive culture need not dictate a place-bound, stationary lifestyle of monogamous relationship to just one place" (p. 233). Research has also suggested that travelling increases the sense of belonging at home, because of an 'absence makes the heart grow fonder' effect (Case, 1996). Therefore, clearly poly-local and poly-scalar attachment to place still occurs and, furthermore, could possibly be a prerequisite for pro-environmental behaviour in some respect.

If we consider that my sample is well-travelled and therefore likely contributing to high levels of carbon-output, it is interesting to note that in a study by Torgler and Garcia-Valiñas (2007), individuals who "see themselves as citizens of the world as a whole" (p. 541) may have higher levels of environmental concern than those who do not because of their increased understanding of pollution and carbon as global issues. Of course, there is an irony here. If travel increases one's global identity and therefore one's concern for the global environment, but also contributes to carbon outputs – where is the balance to be found? Torgler and Garcia-Valiñas (2007) do interestingly also note that people who are strongly attached at just a local scale have a good understanding of their local environmental issues and may be more willing to contribute to protecting and reducing damage on this scale. Perhaps, therefore, having a combined identity – one inclusive of the local and global scale – may be the most likely to generate the highest amount of environmental concern.

There is furthermore the interesting suggestion that global travel does not decrease attachment but shifts the type of attachment felt, whereby people become attached to types of place rather than to specific locations. For example, Feldman (1990, in Lewicka, 2011) found evidence of people feeling a sense of place through identifying themselves as, for example, a 'mountain person' or a 'city person'. In my survey, 83.5% of people likewise felt a sense of belonging and connection to kinds of place in this way (see Figure 5, p. 31). However I would offer the suggestion that this does not in any way reduce a person's ability to feel connected to particular places as well as to types of place, and suggest that rather than a shift occurring from one to the other, it is possible for both types of place attachment to exist and function simultaneously as factors in the forming of a person's identity. As 95.3% of the respondents in my survey felt a sense of belonging to particular places, and 72.9% felt a

sense of belonging to kinds of place, I therefore suggest that multiple place identities are possible and prevalent in Western society.

Unarguably though, with modernity and globalisation does come movement. Indeed in my survey, 65.9% of the respondents were not *currently* residing in the same local area (defined as region, state, or province) in which they spent the *majority of their life* (see Figure 6, p. 32). This is arguably significant because it suggests a relatively high degree of movement, especially when combined with the aforementioned result that 72.9% have at some point resided in a

different country to the one in which they were born. This combination between 65.9% of respondents *currently* living elsewhere to the place they spent the majority of their life, with 72.9% of people having previously lived elsewhere, shows a relatively high degree of movement and travel in my sample. And yet, 96.3% felt a sense of belonging to particular places they had spent time, and 83.5% felt a sense of belonging to types of place, regardless of whether they had spent time in that exact place before.

For example people felt a sense of belonging or connection to mountainous areas, or oceans, and would feel this connection when in a new mountainous area – rather than only feel connected to particular mountains they had previously spent time in. With this in mind, however, 84.7% of respondents had spent time in the kind of place they felt most connected to, and 25.3% (of the 75 which answered this question) had spent 19+ years living in the kind of place they felt most connected to. This is logical, because some authors have found that time spent in a location is one of the biggest predictors for the development of place attachment (Lewicka, 2011; Kelly & Hosking, 2008).

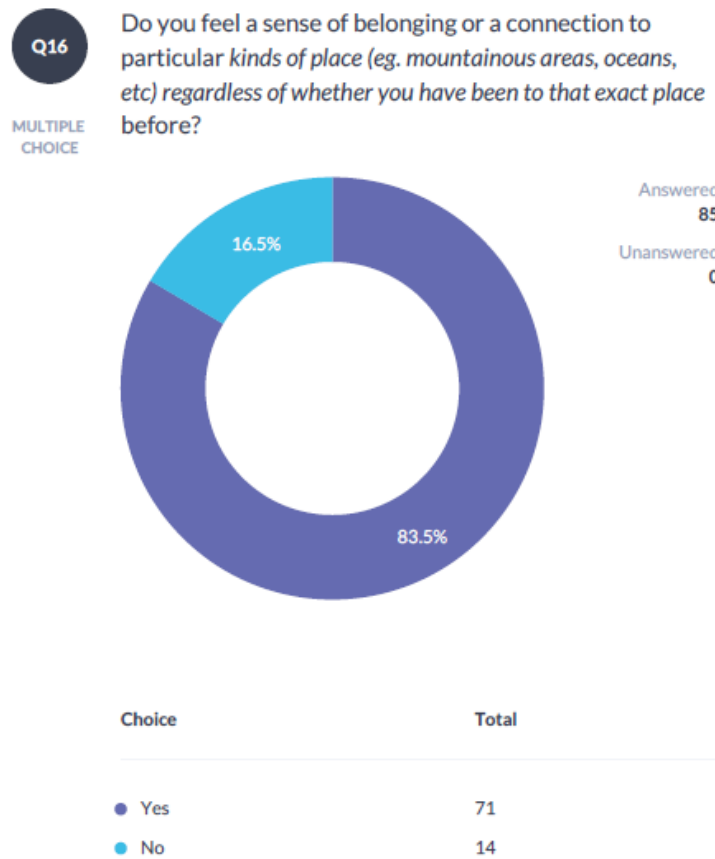


Figure 5: Sense of belonging to kinds of place

Interestingly 18.3% of the sample had spent 1-3 years living in the type of place they felt connected to, and 16% had only spent 1-6 months there. These are still relatively high figures for the amount of time spent in a place, and perhaps the latter statistic indicates a small, but significant, proportion of people who are able to form bonds to type of place within a relatively short period of time. This is corroborated by research which found that physical attachment may grow faster than social attachment (Lewicka, 2011). Hence, people who formed bonds within 1-6 months may have been forming them to physical markers, rather than to social ones. As social bonds often include a historical genealogical background in a place, or built up community ties, this is a logical assumption.

Furthermore, because the top three 'kinds of place' (out of nine) that people felt attachment to were: mountains (37 votes), oceans/lakes (42 votes) and forest (43 votes), it could be suggested that these particular types of place are often relatively lesser-populated, and therefore attachment may be being generated quickly to physical aspects of place. However, of course, communities of people do exist in these locations and people may also have travelled there with a group of meaningful people. In any case, the fact that the ability to bond to places in a short period of time exists, may show that mobile

people are still capable of forming attachments to types of place, and specific places, in a variety of time allowances. This contributes to the answer to my first research question, by suggesting that the generation of place attachment is still very much possible and frequently evidenced, even in the West.

It is also worth considering that the next highest choice for type of place to feel connected to was cities/dense urban areas, which received 32 votes – a clear fourth most likely choice for a type of place to which people felt a sense of connection. This shows that Western people are perhaps not

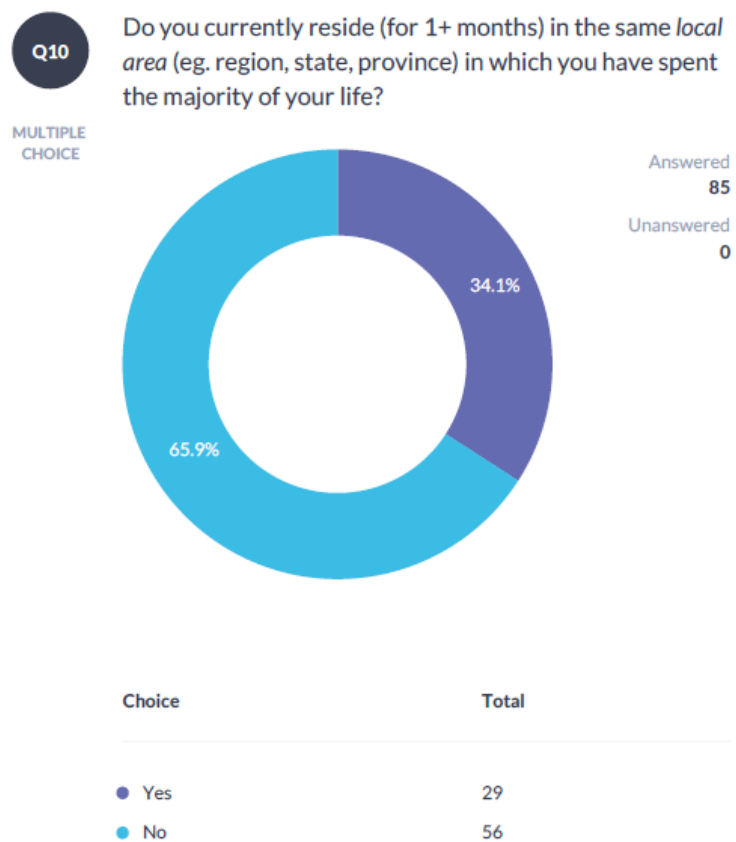


Figure 6: Participants residing outside the local area in which they spent most of their life.

limited to feeling connection to what could be deemed 'nonhuman nature' such as mountains and forests but can also feel it in urban and dense human-nature locations. From a sample of Western citizens, a sense of belonging to urban areas is perhaps not surprising but it is interesting to note, and would undoubtedly benefit from further research. Furthermore, the introduction of an interconnectedness perspective to these findings could drive forward the idea that attachment to *all* types of place, including urban ones, is important to the understanding of the earth as a web of interconnected places. Perhaps this perspective could therefore further pro-environmental behaviour by contributing to an understanding of the earth as a whole organism, becoming and re-becoming constantly, and never being complete. In this way, forming attachment to many places, of many types, in many timeframes, could be posited as a positive attribute of Western society. This is especially true if this place attachment contributes to the generation of pro-environmental behaviours, which will be discussed further anon.

In any case, clearly the ability to forge connections to place is not lost on a sample of people who are also evidently well-versed in travel and movement. Furthermore, connection to and experience of multiple places shapes a person's identity and their values, and a person's values are "responsible for shaping much of our intrinsic motivation" (Kollmuss & Agyeman, 2002, p. 251). Therefore, one suggested method for determining what makes people act in a pro-environmental manner is investigating a person's life experiences – as these shape their values (Kollmuss & Agyeman, 2002). In one study, environmentalists were found to often have distinct recollections of "formative life experiences" (*ibid*, p. 251) in particular places and kinds of place. This is interesting to consider, as these places arguably may have contributed towards the environmentalists' pro-environmental tendencies. This research supports the suggestion that time spent in a place increases place attachment and place identity, but also potentially suggests that that time does not need to be a very long period – but that formative life experiences can occur in places in even a short period of time. This does not devalue that suggestion that the longer a person spends in a place, the higher the chance of place attachment, but merely suggests that place attachment does not *need* to be formed over a long period of time, as previously discussed. In terms of my survey, the respondents who spent only 1-6 months (16%) still felt a sense of place attachment. And henceforth, "if places have the opportunity to influence our worldview such that, even if subconsciously, we alter how we see ourselves connecting with each other, ourselves and the outer world, then their presence in our lives suggests a fundamental opportunity for formative and transformative movement" (Stanger, 2014, p. 143).

Furthermore, as I have suggested, people are capable of creating a sense of place attachment to more than just the places in which they were born, grow up, and die in. Many people in the West are no longer dying in the same places they were born (Devine-Wright, 2013b), but this does not halt the creation of place attachment. Indeed, by travelling and creating place attachment to more than one place, at more than one scale, people are creating poly-local and poly-scalar attachments to place (Devine-Wright, 2013a). This shift has led to a change in conceptualisations of place. Where traditionally a person's experience of place was described as occurring in concentric circles, from one's house to nearby workplaces and the homes of friends and relatives, it has now shifted so that place is instead conceptualised as a globalised "archipelago" (Buell, 2005, p. 72) of possible place attachments. This "mosaic of places" (Devine-Wright, 2013b, p. 165) influences an individual during their lifespan. Thus a person's place of work can be on a different continent and their places of residence divided in a myriad of ways, so that a person may live their life connected to a range of scattered places: "the childhood home one no longer lives near, the homes of friends/relatives one visits, or the second home for the more affluent" (Buell, 2005, p. 72). Ergo, as Buell notes: "even a relative homebody like myself can count a handful of such dispersed places" (*ibid*). Therefore, as aforementioned, globalisation has shifted the traditional sense of place as a bounded entity and instead has created 'openness' of place (Castree, 2009).

This is in line with my suggestion that rather than creating 'placelessness', modernity and globalisation have created an expanded, open sense of place, where people are able to feel attachment to many places at many scales at the same time, and in the same intensity (Devine-Wright, 2013a). Therefore with globalisation and modernity came not placelessness, but an expansion of sense of place within the world, so that, in line with Lewicka (2011) and Castree (2009), there are "multiple, hybrid, fluid, and diverse forms of people-place relations" (Devine-Wright, 2013a, p. 63).

Overall then, as an answer to the first of my research questions, with my survey results and the supporting evidence from the above-cited authors I would join in the argument that – contrary to Relph – place attachment is alive and well with globalised Western citizens of the world. This is corroborated by Lewicka (2011), who writes: "clearly, despite widespread mobilization and globalization, place attachment researchers need not fear idleness" (p. 226).

Moreover, in order to deal with my second research question, I will now add that the presence of place attachment may be part of a complex response to climate change that can have a positive effect on the way people view and treat their surroundings, and therefore on the way that a large portion of arguably privileged and powerful Western citizens could positively react to climate

change. This argument ties into my aforementioned suggestion that a sense of belonging on a 'planetary' scale is possible, inclusive of – rather than at the expense of – attachment to local and specific places. Therefore, the possibility arises of feeling a sense of belonging to the planet as a whole via the development of a 'global human identity' (Der-Karabetian & Ruiz, 1997, in Devine-Wright, 2013b) as a facet of Western individuals' sense of self. I would argue that this global human identity does not eclipse a sense of self associated to local places, but as discussed, adds another layer to the identities of people in today's globalised and interconnected world. Devine-Wright (2013a) likewise suggests that research into these "multiple place attachments and identities that are polylocal and polyscalar" (p. 64) can deepen "our understanding of how these interact to influence levels of engagement with global environmental problems such as climate change" (*ibid*). With this in mind, an increased sense of respect, responsibility and care at the local *and* global scale is not necessarily an inconceivable idea, and having a global identity does not threaten the pre-existing forms of localised belonging (Devine-Wright, et al., 2015). Nor does a global identity delete difference or try to drive the idea of a universal and homogenous humanity, but merely intends to create acceptance and realisation that many people, the world over, are attached to many local places. Additionally, multiple people can be attached to one place in different ways, with no one person's attachment being of greater value than another's. Recognising a global network of local places is therefore important. Diversity is still very much a reality of life in earth, and ought to be a celebrated one. The similarity between people lies with our ability to make attachments to place.

These attachments to place can form to social as well as physical aspects of place (Carrus, et al., 2013; Lewicka, 2011). They can be community ties or cultural affiliation with particular locations or types of location. Furthermore, social connection and community identities have been found to increase a person's likelihood to participate in local action and protection of their community (Manzo & Perkins, 2006 and Lewicka, 2005, both in Carrus et al., 2013). Social cohesion connected to place attachment can therefore lead to activism and protection of a person's surroundings (*ibid*). According to Social Identity Theory, individuals who have a strong sense of identity tied to a group will tend to behave in ways that put the group needs before their own (Carrus, et al., 2013). If this is tied to the creation of group attachments to (interconnected) place, people may therefore put the needs of the place – as part of the social group identity – before their own needs. If their needs are therefore detrimental to the environment for some reason, but the needs of the place include aspects of environmental care and sustainable practices, these may outweigh the needs of the individual. Therefore this combination of place attachment and place identity with social identity can arguably have a positive influence on the generation of pro-environmental behaviour. In further studies, social connections also generate trust within the community, which has been shown to lead

to an increased preference for environmental protection (Torgler & Garcia-Valiñas, 2007). Uzzell et al. (2002) agree, writing: “socially cohesive communities that have a strong sense of social and place identity will be more supportive of environmentally sustainable attitudes and behaviour” (p. 28).

Therefore this continues the discussion of the idea that place attachment could be a contributing factor in the creation of pro-environmental values, outlooks, and behaviour. There is admittedly some contestation about this, because both place attachment, and behaviour (as well as what is deemed ‘environmental’) are complex problems in themselves, and are difficult to measure (Carrus, et al., 2013). However I argue that there is enough evidence to support the suggestion that engagement with place is an important factor in creating an environmentally sustainable future via pro-environmental behaviours. Various studies have in fact proven that there is frequently a positive link between place attachment and pro-environmental behaviour (Carrus, et al., 2013). Eco-psychologists such as Fisher (2002), and Roszak et al. (2005) have identified the importance of a sense of belonging as a key feature of pro-environmental behaviour (see Mayer & Frantz, 2004). Therefore, in connection with place identity, “a sense of belonging may be a prerequisite for increasing environmental protection and fostering ecological behaviour via expanding our sense of self” (Mayer & Frantz, 2004, p. 504). If this is the case, and the conclusion of my first research question is that a sense of belonging exists, this suggests there is hope in the West for pro-environmental behaviour to occur. Indeed, if attachment and connection to place is a ‘prerequisite’ for ecological behaviour, then this is a promising finding.

Wilson’s 1984 ‘biophilia hypothesis’ is frequently used by authors on the subject of place attachment as a possible explanation for why people feel a sense of connection to their surroundings (see Mayer & Frantz, 2004; Kellert, 2010; Beery, et al., 2015; Poon, et al., 2015; and Hinds & Sparks, 2008). The hypothesis suggests that people have a genetic predisposition for affiliation with the ‘nonhuman world’, in a manner that is “instrumental to health, productivity and well-being” (Kellert, 2010, p. 375). Therefore, Wilson and others since have suggested that a close cognitive and affective connection to our surroundings has evolved as part of the human condition (Beery, et al., 2015). The hypothesis includes an important recognition of the emotional and affective connections to place – which it supposes must have been ultimately beneficial for survival (*ibid*). From the perspective of evolutionary history, this is a logical assumption. Prehistorically (and historically) it made sense to understand one’s place cognitively and affectively in such a way as to increase the likelihood of survival by finding suitable foodstuffs, avoiding danger, and being fully aware of one’s surroundings (Fullilove, 1996). This is still a logical pretence for modern humans, even if the ways of finding food and the dangers have changed (*ibid*). While the biophilia hypothesis has some empirical

support, it has not been tested frequently enough to be completely sound (Beery, et al., 2015); however it is still interesting to consider it as a possible partial explanation of the human capacity for sense of belonging and attachment to place.

Furthermore, the biophilia hypothesis was interestingly extended and expanded via the concept of topophilia. Topophilia was initially defined as the “affective bond between people and place” (Tuan, 1974, p. 4, in Sampson, 2012, p. 25). Sampson (2012) then borrowed the term topophilia from Tuan, and expanded it into a hypothesis which, similarly to biophilia, posits that humans “possess an innate bias to bond with local place, including both living and nonliving components” (p. 25-26). Furthermore the topophilia hypothesis suggested that beyond just biology, cultural learning is an important element in place affiliation and attachment (Beery, et al., 2015). Therefore the topophilia hypothesis acts as a “multidisciplinary consideration of how biological section and cultural learning may have interacted during human evolution to promote adaptive mechanisms for human affiliation with nonhuman nature via specific place attachment” (Beery, et al., 2015, p. 8837). Therefore, topophilia is not an evolutionary theory like biophilia, but still suggests that sense of place is a general condition of human existence, and one which is instrumental in “satisfying fundamental human needs” (Beery, et al., 2015, p. 8843) via the ability to create useful cognitive and affective knowledge about a location in order to successfully utilise its resources for survival (Sampson, 2012).

The topophilia hypothesis is even more interesting because there are studies which found that affective connections to the natural environment increase a person’s likelihood to participate and engage with it, and therefore may increase the chances of their participation in pro-environmental engagement (Hinds & Sparks, 2008). When we include theoretical interconnectedness perspectives this concept increases in interest. By reworking the human-nature dichotomies and reconceiving terms such as ‘nonhuman nature’ or ‘the environment’ into “specific places of human experience...that facilitate and frame interpersonal relationships, social formation, and behaviour” (Beery, et al., 2015, p. 8838), the interconnectedness perspective can be supported by the topophilia hypothesis.

Via interconnectedness people are encouraged to recognise themselves as part of “a much broader community” (Beery et al., 2015, p. 8840) – arguably all of the earth as the world-in-formation. Indeed, Beery et al. (2015) write that with the support of the topophilia hypothesis, “human affiliation for place may be used to support our efforts to guide society toward a more sustainable course” (p. 8848). For these authors, this is via a ‘reinvigoration’ of sense of place in ‘nature’ which has been lost in modern urban lifestyles.

My survey results were supportive of the concept of a sense of belonging in ‘nature’ but crucially, people in my survey also reported a high belief that a sense of belonging in places (in this case, places the respondents identified as ‘nature’), also encouraged stewardship of the planet and/or environmentally-sustainable behaviour (see Figure 7). Therefore, along with finding a distinct lack of placelessness, people in the West are not only creating a sense of place, but furthermore, 90.6% of them believe this sense of place and connection to their surroundings will encourage pro-environmental behaviour. This is a substantial finding, especially considering that the depictions of ‘nature’ in the survey were also not limited to nonhuman nature, but included manifestations of nature which involved human influence.

Q25

Do you think a sense of belonging to nature encourages stewardship of the planet and/or environmentally-sustainable behaviour?

MULTIPLE CHOICE

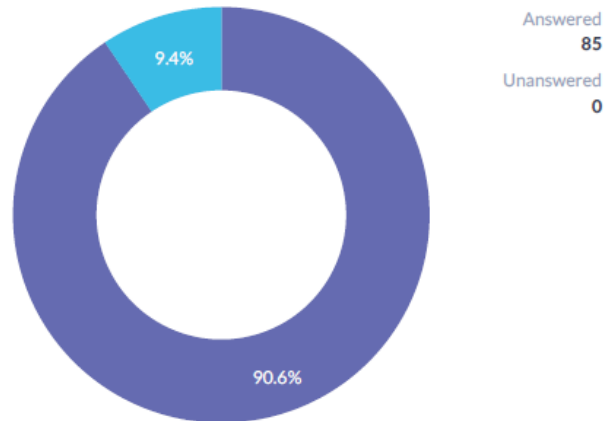


Figure 7: Belonging and pro-environmental behaviour

For example respondents identified with a reconceptualization of nature to include urban features; one respondent commented “it was [a] bit hard to draw a concrete border [around] what to consider to be a part of nature – as humans [are] being part of nature, then logically the buildings and settlements are also part of it...” (P12). Furthermore, another respondent commented on the fact that he ticked every box in the ‘what do you consider nature’ question, explaining: “a huge amount of humanity’s problem with its stewardship of the planet is its sense that we have somehow ‘transcended nature’. We are as much nature as anything else” (P1). These comments show a thought-process which is interesting from Western respondents, and shows that attachment to ‘nature’ is not necessarily just attachment to nonhuman nature, but may include urban and other human-influenced areas.

This is further evidenced by the survey question on what people deemed to be ‘part of nature’ in my study. For this, a list of 20 options for ‘nature’ was provided, with instructions to ‘tick all that apply’. In this case ‘farms and cultivated land’ was chosen 39 times in the survey as being part of nature, ‘parkland/recreation spaces *inside* cities and urban areas’ was chosen 42 times, ‘private gardens’

was chosen 26 times, and even ‘indoor gardens’ was chosen 20 times to represent nature. There were still admittedly a high number of options chosen which may be considered traditional nonhuman nature. However, the former does suggest that there are a number of respondents who do not strictly separate anything human-influenced from nature – with urban gardens and recreational places being frequently chosen as part of nature. And thus, these findings are interesting but definitely act as only the beginning of research into the nature-human divide which this thesis does not have time nor space to do justice. However they serve here alongside the comments on nature being inclusive of more than just nonhuman nature, to suggest that – even in the West – a sense of belonging to nature exists, a sense of belonging to place exists, and a belief that not all nature is strictly nonhuman also exists. The importance of this in connection to pro-environmental behaviour is essential to research question two.

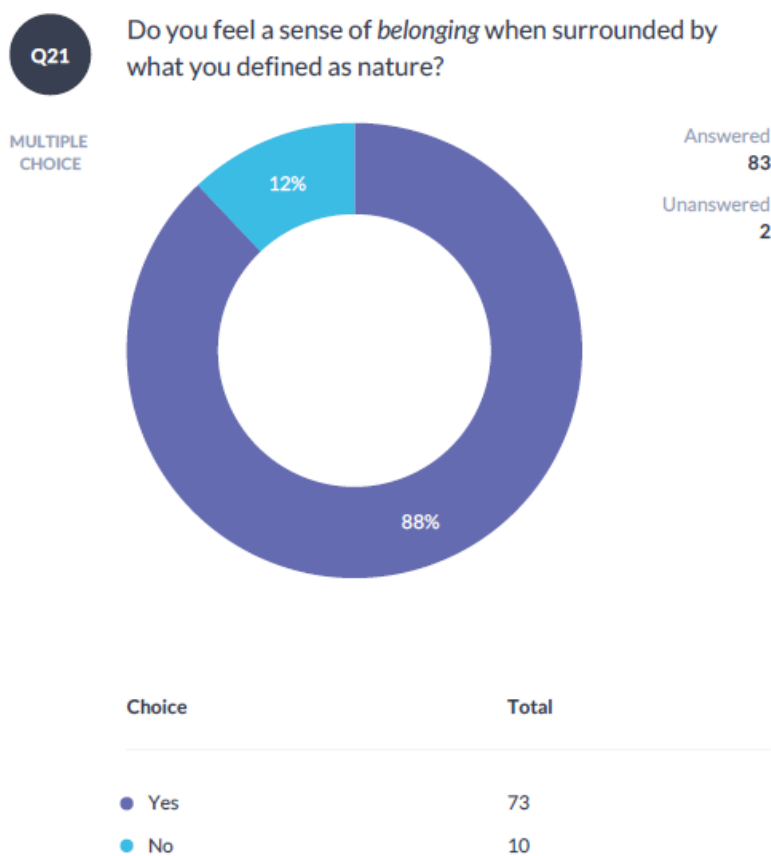


Figure 8: Belonging in 'nature'

Furthermore, eighty-eight percent of respondents answered that ‘yes’ they felt a sense of belonging when surrounded by what they defined as nature (see Figure 8). This result complements the findings by other authors that people do have the ability to fashion a sense of belonging to their ‘natural’ surroundings (see Hinds & Sparks, 2008). Additionally, with nearly 90% of my sample feeling a sense of belonging to what they deemed their ‘natural’ surroundings, the need to ‘re-embed’ in nature is clearly not as necessary as

authors such as Beery et al. (2015) might suggest. People in the West are instead displaying evidence of already being embedded in what they deem nature, as they form bonds of belonging to it. This is expanded when we consider that via interconnectedness perspectives, we are always embedded in our surroundings. This is especially interesting in addition to the aforementioned crucial finding that 90.6% of the respondents believe that a ‘sense of belonging to nature encourages stewardship of

the planet and/or environmentally-sustainable behaviour'. The combination of these findings supports the earlier studies suggesting a link between connection to nature, and pro-environmental behaviour.

However I would posit the suggestion that place attachment – even to urban areas – is all part of a respect and understanding of our surroundings which can lead to a sense of connection and care for all places, which would be even more beneficial to the environment as a whole. By this I mean that connection to simply 'natural' places is a dangerous zone to enter into, as definitions of nature are exceedingly contested. However, if by viewing nature as something to which we belong encourages pro-environmental behaviour (as the above authors give reason to believe it does) then by viewing nature *and all things* as something to which we belong and which belongs to us, in a process of becoming and being-in-the-world, then pro-environmental behaviour should ensue. Here, Kellert (2010) agrees that the viewpoint of only attaching oneself to apparently 'natural' places (in whatever guise), is not good enough – but experiential connections to all places, including the urban and indoor ones, is necessary for sustainable behaviour. Again, the inclusion of interconnectedness perspectives could be beneficial, and the promising responses from my survey serve to suggest that the possibility to do what Kellert (2010) suggests is not that far-fetched.

Henceforth, if we feel attachment most strongly to places we experience and spend time in – and many respondents spend time in Western and often urban environments – then extending the interconnectedness perspective is beneficial. One way to do this is for example by extending Leopold's land ethic theory, whereby "we can be ethical only in relation to something we can see, feel, understand, love or otherwise have faith in" (Leopold, 1996, p. 230 in Kellert, 2010, p. 374) to include an interconnected perspective of place attachment. In doing so we can posit a sustainable future for the planet. Kellert (2010) henceforth exemplifies this suggestion, writing that we need to commit to a sense of connection to all types of place and space which we inhabit. And furthermore, Leopold confirms that "there must be some force behind conservation, more universal than profit, less awkward than government...something that reaches all times and places.... Something that brackets everything from rivers to raindrops, from whales to hummingbirds, from land-estates to window boxes...I can see only one such force: a respect for land as an organism" (1949, p. 198 in Kellert, 2010, p. 378). I would add that this respect for land as an organism, inclusive of all things, is an interconnected perspective.

There is furthermore empirical evidence to support Leopold's claim. A study by Schultz (2000) found that the degree to which people view themselves as interconnected to nature impacts their environmental concerns. Schultz showed that people value things which are included in their sense

of self, and identity, and if their surroundings are included in their sense of self – especially as part of an interconnected system – then their environmental concern increased (*ibid*). Because this connection to place can form, as Orr puts it, ‘by stealth’, and perhaps without a person necessarily immediately recognising it, what occurs over time is attachment where the “boundary of the person and place become almost indistinguishable” (Orr, 2011, p. 223).

Place identity therefore becomes important here, because if we conceptualise places as part of our own existence and identity then it is in our best interests to protect and care for them, as it is in our own interests to care for ourselves. In Rogan et al.’s (2005) study of farmers in Western Australia, the authors found that people did shift their behaviours with regard to the land as they learnt to reassess the impacts of detrimental farming practices and became involved in conservation and pro-environmental behaviours instead. The participants’ ongoing experience with the land led to it being recognised by them as part of their identity, to which they then tied concepts of right and wrong and eventually came to decide that certain degrading practices were ‘wrong’, as they harmed the places they loved, experienced, and identified with (Rogan, et al., 2005). Evidently, as aforementioned, the alienation caused by a separation of humans from nature, or from seeing the globe as a separate entity to humanity, needs to be shifted in favour of a place identity encompassing all place – via the specific places we experience daily. Heise (2008 in Devine-Wright et al., 2015) likewise suggests that we need a ‘sense of planet’ alongside our ‘sense of place’. I argue that they should be conceived as one and the same, remembering that there are multiple forms of attachment and that they are not separate from one another (Devine-Wright, et al., 2015). Additionally, a 2016 study of the impact of ‘mindfulness’ on people’s behaviours found it positively linked to pro-environmental behaviour, via an increased sense of interconnectedness felt by those who practiced mindfulness techniques (Barbaro & Pickett, 2016). This is due to mindfulness increasing a person’s awareness of their surroundings as part of themselves. Mindfulness hence increased a connection to nature, which corresponded to pro-environmental behaviour (*ibid*).

This is because “if people feel connected to nature then they will be less likely to harm it, for harming it would in essence be harming their very self” (Mayer & Frantz, 2004, p. 512). Evidently, “environmental concern is tied to a person’s notion of self” (Schultz, 2000, p. 394) and how they define themselves as part of an interconnected system. One respondent in my survey even commented that they felt varying levels of belonging to different types of place (for example not enjoying areas of dense forest, or dense ‘urban jungles’) but that what they really felt was “more a sense of interconnectedness” (P5). This sense of interconnectedness is in line with the New Environmental Paradigm theories (Van Liere, 1978 in Schultz, 2000) and can be a useful trait in

developing pro-environmental behaviours. As Schultz (2000) outlined above, if environmental concern is linked to a person's sense of self and identity, they may be more willing to protect their surroundings. If interconnectedness is added to the equation, alongside poly-local and poly-scalar attachment to place, place identities, and as social and community bonds, then place attachment becomes a web of interconnected attachments and identities, tied to experience, memory, and imagination. In doing so place attachment via interconnectedness ideally leads to the formation of a sense of self within a sense of interconnected place identities – which ought to lead to a tendency to act pro-environmentally. This therefore begins to answer my second research question.

In the interviews conducted by Rogan et al., one of the core recurring themes was indeed place identity, with one participant saying of the Australian bush: "I love [it]...I mean it is all just part of my identity now" (participant Kaye L., 2005, p. 152). Loving a place makes it part of a person's identity, but it also arguably generates action. As Moore and Nelson (2010) aptly write: "we do fall in love with places, there is no doubt...loving a place is a way of feeling, connected and at peace. But loving a place is also a way of acting...loving a place means being kind to it, protecting it, caring about its well-being as much as your own" (p. 354). They argue that it is through emotional and sentimental connections to place that we develop a sense of belonging that is akin to place attachment, which is not measurable in economic frameworks but which is essential to living well, and to which we owe a responsibility to protect places via pro-ecological behaviours (Moore & Nelson, 2010). Research into pro-environmental behaviours did find that they were positively impacted by the "strength of emotional connection towards the natural environment" (Hinds & Sparks, 2008, p. 109; Kollmuss & Agyeman, 2002). This is reiterated empirically by Kals et al. (1999) and Nord et al. (1998 in Hinds & Sparks, 2008), who found that contact and emotional affinity with nature is a positive predictor for nature-protective and other pro-environmental behaviours. Chawla's (1999) work likewise found that emotional connections to one's surroundings fostered environmental awareness and concern. In this way, "emotional connection to place induces worry for its protection" (Stanger, 2014, p. 106). Experience in 'nature' has also been shown to increase the tendency to recycle, use public transport, and other pro-environmental behaviours (Hinds & Sparks, 2008). Furthermore a sense of responsibility increased the likelihood of an individual acting pro-environmentally (Kollmuss & Agyeman, 2002). All of these studies contribute to the conclusion that place, and specifically place attachment, can be beneficial in creating and encouraging pro-environmental behaviours. They therefore are representative of the literature which supports an positive answer to my second research question, by helping to suggest that place attachment can indeed very much be connected to pro-environmental behaviours.

In further evidence, Rogan et al. (2005) found that a sense of responsibility and moral decision-making about right and wrong ways to treat the environment frequently appeared as themes in their interviews, and were one aspect of changing people's behaviour towards their surroundings. Moore and Nelson (2010) found further evidence that a sense of responsibility for places increased the protection and care of the environment.

Along with responsibility, it is interesting to consider the effect of empathy on pro-environmental behaviour, and how this can be connected to place attachment. For example, in a study done by Berenguer (2007), evidence was found which showed that empathic people had stronger environmental behaviours and attitudes than those who displayed lower levels of empathy. Furthermore, Stern et al (1993 in Kollmuss & Agyeman, 2011) expanded Schwartz's 1997 altruism theory to generate a theory which found that altruistic tendencies increased with awareness of suffering – i.e. empathy – which in turn increased the feeling of responsibility (Kollmuss & Agyeman, 2002). Therefore, by combining this theory with the empirical support of Berenguer's (2007) study, clearly the ability to 'fall in love with places' and care about their wellbeing as Moore and Nelson (2010) suggest we do is indeed a valid method for increasing pro-environmental behaviour. Additionally, the introduction of empathy towards specific living objects (trees and birds) in the study led to an increased likelihood of pro-environmental behaviour towards that object, but also – crucially – to "nature as whole" (Berenguer, 2007, p. 280). If nature 'as a whole' is considered to be inclusive of *all* things and places (including human-influenced ones) in an interconnected world then attachment to place in an empathic and caring manner, inclusive of the emotional feelings we create in conjunction with place, forms a kind of place attachment which should lead to increased levels of pro-environmental behaviour on a grand scale. This is a favourable response to both parts of my second research question.

In answering my second research question affirmatively in this way, it is also worth mentioning my findings on belief systems and pro-environmental tendencies from my majority-Western sample. Belief systems are inclusive of values, norms, and experience of individuals, and are not constricted solely to religious beliefs, though they may include them (Usó-Doménech & Nescolarde-Selva, 2016). Interestingly, my study found that 94% of 84 respondents thought that their personal belief system encouraged environmentally-sustainable behaviour (see Figure 9, p. 44). This becomes interesting when we consider that a sense of stewardship here is stemming from morals and norms inclusive in Western citizens' personal belief system. This arguably contradicts the supposedly environmentally destructive and solely rationalist belief system which Plumwood (2002) argues is abundant in the West. Instead, my survey may indicate that there is some support for the idea that Western citizens

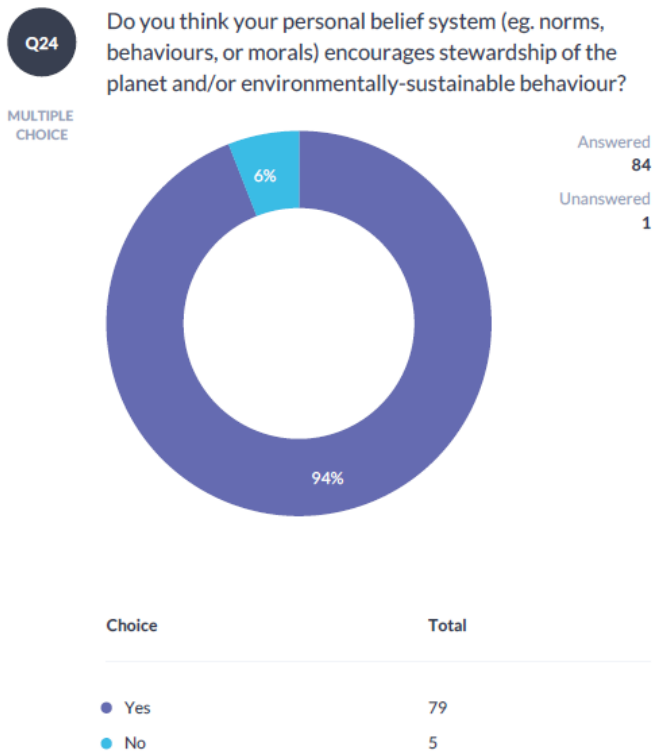


Figure 9: Personal belief systems and sustainable behaviour

environmentally sustainable is not provided by the survey, and therefore discussions of carbon footprint are not possible here, however there is clearly some belief in the value of pro-environmental behaviour within Western belief systems. Hence, in conjunction with the findings that people feel attachment to specific places, to types of place, and to nature, as well as a belief that this attachment creates pro-environmental behaviour, this finding that personal belief systems align with pro-environmental behaviour is not surprising, but it is supportive. It also connects to the idea that people include place in their personal lives, as place attachment and place identity have shown. Therefore, place is functioning as an important factor in the formation of belief systems and identities. If these belief systems are also conducive to pro-environmental tendencies, then this evidence further affirms a positive answer to my second research question, on whether place attachment can be connected to pro-environmental behaviours.

Henceforth, it can be said that not only are people still connected to place in the West, in answer to research question one, but they are also connected across locations and scales. Furthermore these place attachments have also indicated a tendency to create at least some pro-environmental behaviour – which answers the first part of research question two. To answer the second part, this thesis has also discussed the idea that by including interconnectedness perspectives place attachment has even better chances of generating pro-environmental outlooks and behaviors. Thus,

believe they hold a responsibility towards the environment and that this is present in their norms, behaviours and values. This is logical given their displayed attachment to place and the discussion on place identity above, whereby place becomes part of the person. This, in turn, ought to mean that if place forms part of a person’s identity, it will impact their values and outlooks. Consider that a person’s belief system can be individual and specific to them or can be found throughout a group of people, as can identity.

Again it must be repeated that evidence on *what* behaviours are considered to be

both research questions are responded to with a positive and hopeful answer: there may yet be hope in the West for place attachment to contribute to the encouragement of pro-environmental behaviour, especially with the addition of interconnectedness perspectives.

Concluding Remarks

Admittedly, and as Heidegger's penchant for Nazism exemplifies, place attachment can have negative connotations of exclusionary politics and othering (Harvey, 1996). What is important is to remember that this does not have to be the case. Arguably, experience in other countries as part of a globalised world can increase a sense of inclusion instead of exclusion through the experience and understanding of a variety of cultures and places – at least to the extent that we remain open to sharing our experience of place with others. Indeed, as place attachment is formed both through physical and social attachment, it is useful to recognise that community-building and community-memories of place help shape it as it shapes us, and a globally inclusive identity is important for place-attachment to work positively as a non-exclusionary force for good. Indeed, against Heidegger's exclusionary experiences of place, my research has shown that mobility is not a bad thing, and indeed we should encourage people to move and travel to new places, learn, and experience each other's meaningful places, so that they too are enamoured with attachment towards them and encouraged to protect, defend, love, admire, and connect to them as we have.

Of course, this is not to say that *all* environmental problems will be solved by a connection to place, nor is it to say that *all* Westerners are pro-environmental in their outlook or behaviour. This thesis is hopefully however a worthwhile step towards recognising place attachment as a possible facet of a Western lifestyle that could encourage pro-environmental behaviours in some ways. Place attachment does clearly still exist in Western society, and this thesis has collated evidence of place attachment's contribution to pro-environmental behaviour and hence has contributed to the idea that a connection between the two is feasible and potentially beneficial.

There are still issues, such as the carbon footprint caused by the extensive travel that many Western citizens participate in, and the displacement or possible unequal exchange of resource use and consumption in the West. These were not the focus of this thesis, but that does not negate their importance. Further research should absolutely consider and investigate issues such as these alongside the connection between place and pro-environmental behaviour. We should not be without hope, though. As my findings and others have shown, there is evidence of people within the West who do have concern for the environment. In Franzen's (2004) study, participants from OECD countries had more concern for the 'global condition of the environment' than those in non-OECD

countries (*ibid*). However, of course, this does not account for the fact that a large carbon footprint and environmentally destructive behaviour is much more frequent in OECD countries than non-OECD ones. Nevertheless, evidence of concern for the global condition of the environment can be viewed as a thread of hope. Further, as similarly recognised in this thesis, Franzen (2004) found that concern with climate change and other environmental issues *is* increasing globally.

Certainly, the noted irony in place attachment's ability to increase pro-environmental behaviours, alongside the fact that place attachment at a global and interconnected level may also increase with (carbon-generating) travel and mobility, is still important. However, as Franzen (2004) also notes, "a change in attitudes and values in a population does not occur within a generation, but between generations" (p. 307), and thus perhaps the impact place attachment has on our behaviour has not yet reached its full potential. David Orr (2011) writes some words of wisdom when considering the importance and the difficulties that arise when discussing place's place in pro-environmental change, when he explains: "we are caught in the paradox that we cannot save the world without saving particular places" (p. 161) but also that we cannot save these places (and therefore the world) without national and international measures which deal with environmental issues present in current economics and politics. He elaborates: "a world that takes its environment seriously must come to terms with the roots of its problems, beginning with the place called home" (*ibid*, p. 161). I would add that furthermore, we can perhaps generate a better way of being in the world with an increased understanding and application of interconnectedness perspectives and recognition of the importance of place to identity, values, beliefs, and behaviour, so that change can occur now and in the future.

Furthermore, place attachment is only one of the many influencers on our behaviour, and can only ever be part of the solution to environmental issues. The fact that it is sometimes formed alongside other negative environmental behaviours is something which is important to recognise. The fact that despite this it still does have *some* positive impact on our pro-environmental behaviour is equally important to recognise. Further research into the discrepancy between place attachment formation on a local and global scale and the tendency to behave pro-environmentally would be fascinating. Furthermore, the increasing use of interconnectedness perspectives may be one way to help tackle some of the non-pro-environmental behaviours exhibited in the West.

This thesis was therefore still able to support the idea that Western citizens do absolutely feel place attachment, and therefore 'placelessness' is not as much of an issue as some authors have suggested. It furthermore attempted to draw a link between said place attachment and other research which evidenced that place attachment contributes to pro-environmental behaviour, and

also suggested that via an interconnectedness perspective this place attachment could prove to be a useful aspect of Western existence to further pro-environmental outlooks and behaviours of those living in the West, and – ideally – create a hopeful future for the planet.

Additionally, if connection to nature leads to increased wellbeing – as many authors agree it does – then “this would allow environmentalists to put a more positive spin on ecological behaviour than the doom and gloom messages that warn the public to change or die” (Mayer & Frantz, 2004, p. 512). There is hope, yet. Indeed even the ‘retired’ environmentalist Paul Kingsnorth told the New York Times that there “can be at least small pockets where life and character and beauty and meaning continue” (Smith, 2014). He further adds that if he could save just one of these places from destruction, “maybe that would be enough” (*ibid*). Interestingly, in the comments box at the end of my survey, one respondent – though thoroughly disparaging of what he called “pseudo liberal crap masquerading as science” – did write that he believed that “all everyone needs to do is be environmentally aware and take care of nature in whatever form” (P49). I would agree that being ‘environmentally aware’ and caring for your own patch of ‘nature in whatever form’ – *especially* if that definition of form is one inclusive of all places – can indeed be beneficial. As this thesis has shown, there is some clear evidence which demonstrates that place attachment does contribute to a sense of belonging, identity, and with it, pro-environmental behaviour. Clayton importantly succinctly summarises this concept, writing: “we may not protect all the things we care for, but we are unlikely to protect the things we don’t care for” (Clayton, 2013, p. 219). Secondary literature provided evidence that care was found to increase responsibility, and of course this thesis has attempted to show that place attachment does still exist, partially due to it being part of a personal and community identity, and therefore as something which would be cared for. Beyond this, I would add that it is possible to have a global and local sense of connection to an interconnected (“liberal crap”) world. With this in mind, perhaps we can do one better than what Kingsnorth calls ‘good enough’.

I have argued that generating pro-environmental outlooks and behaviour is possible, especially via experiential engagement, identity-formation and attachment with interconnected places. This interconnectedness has been an essential component of this thesis. A sense of interconnectedness tied to place attachment is in a large part formed via experience of a place. Thus, people are formed via experience of a place, places are formed via experience with people, and in this way all things are formed via and through each other in a process of being-in-the-world and being-the-world together. If people are each connected to specific places via their experience of being-in-the-world, then they have a sense of identity tied to those places. The concept of one’s identity being inextricably linked

to place through the traversing of life stages in various places causes those places to become part of ones conceptualisation of self. In this way, I argue that place is vital to person, and vice versa. There is no way to exist without existing in places, and there is no 'place' that is not a place in earth. This is because people and place are constantly in motion, and constantly changing each other and forming and reforming each other.

And if people, worldwide, are forming these bonds to place, and are creating sense of place and place attachment, then there is a series of local place attachments being formed and reformed all the time, globally. The need to feel "a sense of belonging to something larger than themselves" (Mayer, et al., 2009, p. 635) is something that humans in our modernised world are still absolutely in need of, and still feeling. Furthermore, it can become part of a narrative of hope and promise for the future, as opposed to the negativity and fatalism offered by many environmentalists in an attempt to get people to change their behaviours for a sustainable future (*ibid*). In this way, people who view themselves as "plain and simple members of a natural community" (Mayer, et al., 2009, p. 638) will not only be more likely to think and act in more environmental ways, but will also have increased wellbeing, attentiveness, reflexivity and other health benefits identified with experience in 'nature' (*ibid*). And, as I have shown that many people in the West *do* still think of themselves as attached to places, this is promising.

"What we call 'life' is a general condition which exists, to some degree or other, in every part of space: brick, stone, grass, river, painting, building, daffodil, human being, forest, city. And further...every part of space – every connected region of space, small or large – has some degree of life..."

(Alexander, 2002, p. 77 in Lewicka, 2011, p. 224).

Viewing life in this way and feeling a sense of belonging to it via the places we see as part of our sense of self, and which we value and care about, is henceforth arguably one route towards a more sustainable present, and future, for the planet as a whole. This is also what Stanger (2014) suggested in writing that we ought to live "in recognition that everything is truly connected and that we are all relationally accountable and responsible to more than just ourselves as a species" (p. 149), and therefore, we are accountable also to place. Thus, each person is connected and responsible for places which are interconnected in the whole world-in-formation; meaning people are connected to each other, and to each other's places – globally via the local. This is true even for those in the West, where placelessness has been shown to be a non-issue in the formation of attachment to place.

Therefore, the West is not lost to a future of destructive behaviour, but can be a source of pro-environmental behaviour and a source for positive responses to some of the challenges we as a planet are facing. Place attachment and interconnectedness are not all-inclusive solutions, as the problems of environmental sustainability are complex. However this thesis has shown that they do have the capacity to act together as one facet of what will need to be a complex set of solutions to a complex set of problems.

Works Cited

Graphics Factory, 2009. *Vector World Map*. [Online]

Available at: <http://www.vectorworldmap.com/>

[Accessed 20 March 2016].

Adger, W. N., Barnett, J., Chapin III, F. S. & Ellemor, H., 2011. This Must Be the Place: Underrepresentation of Identity and Meaning in Climate Change Decision-Making. *Global Environmental Politics*, 11(2), pp. 1-25.

Barbaro, N. & Pickett, S. M., 2016. Mindfully Green: Examining the effect of connectedness to nature on the relationship between mindfulness and engagement in pro-environmental behavior. *Personality and Individual Differences*, Volume 93, pp. 137-142.

Beery, T., Jönsson, K. I. & Elmberg, J., 2015. From Environmental Connectedness to Sustainable Futures: Topophilia and Human Affiliation with Nature. *Sustainability*, Volume 7, pp. 8837-8854.

Berenguer, J., 2007. The Effect of Empathy in Proenvironmental Attitudes and Behaviors. *Environment and Behavior*, 39(2), pp. 269-283.

Brown, G., 2011. *What is 'The West'?*. [Online]

Available at: <https://faculty.univ.edu/gbrown/westernciv/wc201/wciv2c1/wciv2c1lsec2.html>

[Accessed 18 May 2016].

Buell, L., 2005. *The Future of Environmental Criticism: Environmental Crisis and Literary Imagination*. Oxford: Blackwell Publishing.

Caplan, P., 2014. Engaging in 'Engaged' Anthropology. *Anthropology in Action*, 21(3), pp. 3-11.

Carrus, G. et al., 2013. Chapter 12: Place Attachment, Community Identification and Pro-Environmental Engagement. In: *Place Attachment: Advances in Theory, Methods and Applications*. London: Routledge, pp. 154-164.

Case, D., 1996. Contributions of Journeys Away to the Definition of Home: An Empirical Study of a Dialectical Process. *Journal of Environmental Psychology*, 16(1), pp. 1-15.

Castree, N., 2009. Chapter 9: Place: Connections and Boundaries in an Interdependent World. In: N. Clifford, S. Holloway, S. P. Rice & G. Valentine, eds. *Key Concepts in Geography*. 2nd ed. London: SAGE Publications Ltd., pp. 153-172.

Chawla, L., 1999. Life Paths into Effective Environmental Action. *The Journal of Environmental Education*, 31(1), pp. 15-26.

Clarke, T., 2013. What on World is the Earth? The Anthropocene and Fictions of the World. *Oxford Literary Review*, 1 January. pp. 5-24.

Clayton, S., 2013. Nature and Animals in Human Social Interactions: Fostering Environmental Identity. In: M. Bekoff, ed. *The Case for Compassionate Conservation*. London: University of Chicago Press, pp. 211-222.

Day, C., 2003. *Spirit and Place*. Oxford: Architectural Press.

Devine-Wright, P., 2013a. Think global, act local? The relevance of place attachment and place identities in a climate changed world. *Global Environmental Change*, Volume 23, pp. 61-69.

Devine-Wright, P., 2013b. Chapter 13: Dynamics of Place Attachment in a Climate Changed World. In: L. C. Manzo & P. Devine-Wright, eds. *Place Attachment: Advances in Theory, Methods and Applications*. London: Routledge.

Devine-Wright, P., Price, J. & Leviston, Z., 2015. My Country or My Planet? Exploring the Influence of Multiple Place Attachments and Ideological Beliefs Upon Climate Change Attitudes and Opinions. *Global Environmental Change*, Volume 30, pp. 68-79.

Escobar, A., 2001. Culture Sits in Places: Reflections on Globalism and Subaltern Strategies of Localization. *Political Geography*, Volume 20, pp. 139-174.

Franzen, A., 2004. Environmental Attitudes in International Comparison: An Analysis of the ISSP Surveys 1993 and 2000. *Social Science Quarterly*, June, 84(2), pp. 297-308.

Fullilove, M. T., 1996. Psychiatric Implications of Displacement: Contributions From the Psychology of Place. *The American Journal of Psychiatry*, December, 153(12), pp. 1516-1523.

Göksenin, I. & Finch, E., 2004. Place Attachment and Sense of Belonging. *Facilities*, Issue 5/6, pp. 120-128.

Haraway, D., 1988. Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective. *Feminist Studies*, 14(3), pp. 575-599.

Harvey, D., 1996. *Justice, Nature and the Geography of Difference*. Cambridge, Massachusetts: Blackwell Publishers Inc..

Hinds, J. & Sparks, P., 2008. Engaging with the Natural Environment: The Role of Affective Connection and Identity. *Journal of Environment Psychology*, Volume 28, pp. 109-120.

Horlings, L. G., 2015. The Inner Dimension of Sustainability: Personal and Cultural Values. *Current Opinion in Environmental Sustainability*, Volume 14, pp. 153-169.

- Humphery, K., 2010. *Excess: Anti-Consumerism in the West*. Cambridge: Polity Press.
- Ingold, T., 2000. *The Perception of the Environment: Essays on Livelihood, Dwelling and Skill*. Abingdon: Routledge.
- Kals, E., Schumacher, D. & Montada, L., 1999. Emotional Affinity Toward Nature as a Motivational Basis to Protect Nature. *Environment and Behaviour*, 31(2), pp. 178-202.
- Kellert, S. R., 2010. For the Love and Beauty of Nature. In: M. Nelson & K. Moore, eds. *Moral Ground: Ethical Action for a Planet in Peril*. San Antonio: Trinity University Press, pp. 373-378.
- Kelly, G. & Hosking, K., 2008. Nonpermanent Residents, Place Attachment, and "Sea Change" Communities. *Environment and Behaviour*, July, 40(4), pp. 575-594.
- Kingsnorth, P., 2012. Confessions of a Recovering Environmentalist. *Orion Magazine*, 31(1), pp. 16-23.
- Kollmuss, A. & Agyeman, J., 2002. Mind the Gap: why do people act environmentally and what are the barriers to pro-environmental behavior?. *Environmental Education Research*, 8(3), pp. 239-260.
- Lewicka, M., 2011. Place Attachment: How Far Have We Come in the Last 40 Years?. *Journal of Environmental Psychology*, 31(3), pp. 207-230.
- Massey, D., 1991. A Global Sense of Place. *Marxism Today*, June, pp. 24-29.
- Mayer, F. S. & Frantz, C. M., 2004. The Connectedness to Nature Scale: A Measure of Individuals' Feeling in Community with Nature. *Journal of Environmental Psychology*, Volume 24, pp. 503-515.
- Mayer, S., Frantz, C. M., Bruehlman-Senecal, E. & Dolliver, K., 2009. Why is Nature Beneficial? The Role of Connectedness to Nature. *Environmental Behavior*, 41(5), pp. 607-643.
- Meadows, D. H., 2009. *Thinking in Systems: A Primer*. London: Sustainability Institute.
- Moore, K. & Nelson, M., 2010. Yes, Because We Love the World. In: K. Moore & M. Nelson, eds. *Moral Ground: Ethical Action for a Planet in Peril*. San Antonio: Trinity University Press, pp. 354-355.
- Morton, T., 2010. Ecology as Text, Text as Ecology. *Oxford Literary Review*, 32(1), pp. 1-17.
- Orr, D., 2011. *Hope is an Imperative: The Essential David Orr*. Washington D.C.: Island Press.
- Oxford Dictionaries, 2016. *Oxford Dictionaries*. [Online]
Available at: <http://www.oxforddictionaries.com/definition/english/place>
[Accessed 7 May 2016].
- Plumwood, V., 2002. *Environmental Culture: The Ecological Crisis of Reason*. New York: Routledge.
- Poon, K.-T., Teng, F., Chow, J. T. & Chen, Z., 2015. Desire to Connect to Nature: The Effect of Ostracism on Ecological Behaviour. *Journal of Environmental Psychology*, Volume 42, pp. 116-122.

Rogan, R., O'Connor, M. & Horwitz, P., 2005. Nowhere to Hide: Awareness and Perceptions of Environmental Change and Their Influence on Relationships with Place. *Journal of Environmental Psychology*, Volume 25, pp. 147-158.

Sampson, S. D., 2012. The Topophilia Hypothesis: Ecopsychology Meets Evolutionary Psychology. In: P. H. J. Kahn & P. H. Hasbach, eds. *Ecopsychology: Science, Totems and the Technological Species*. London: The MIT Press, pp. 23-54.

Schultz, W. P., 2000. Empathizing with Nature: The Effects of Perspective Taking on Concern for Environmental Issues. *Journal of Social Issues*, 56(3), pp. 391-406.

Seamon, D., 2015. Situated Cognition and the Phenomenology of Place: Lifeworld, Environmental Embodiment and Immersion-in-world. *Cognitive Processing*, September, Volume 16, pp. 389-392.

Smith, D., 2014. *It's the End of the World as We Know It...And He Feels Fine*. [Online] Available at: www.nytimes.com/2014/04/20/magazine/its-the-end-of-the-world-as-we-know-it-and-he-feels-fine.html?_r=0 [Accessed 24 April 2016].

Stanger, N., 2014. *(Re)placing ourselves in nature: An exploration of how (trans)formative places foster emotional, physical, spiritual and ecological connectedness*. s.l.:University of Victoria.

Stern, P. C., 2000. Toward a Coherent Theory of Environmentally Significant Behavior. *Journal of Social Issues*, 56(3), pp. 407-424.

Torgler, B. & Garcia-Valiñas, M. A., 2007. The Determinants of Individuals' Attitudes Towards Preventing Environmental Damage. *Ecological Economics*, Volume 63, pp. 536-552.

United Nations, 1987. *Our Common Future - The Brundtland Report*, Oxford: Oxford University Press.

Urry, J., 2013. Chapter 53: Are Increasing Greenhouse Gas Emissions Inevitable?. In: *World Social Science Report 2013: Changing Global Environments*. Paris: OECD Publishing and UNESCO Publishing, pp. 340-344.

Usó-Doménech, J. & Nescolarde-Selva, J., 2016. What are Belief Systems?. *Foundations of Science*, 21(1), pp. 147-152.

Uzzell, D., Pol, E. & Badenas, D., 2002. Place Identification, Social Cohesion, And Environmental Sustainability. *Environment and Behavior*, 34(1), pp. 26-53.

Walter, I., Leviston, Z., Price, J. & Devine-Wright, P., 2015. Responses to a Worsening Environment: relative deprivation mediates between place attachment and behaviour. *European Journal of Social Psychology*, 45(7), pp. 833-846.

Wright, S., 2012. Emotional Geographies of Development. *Third World Quarterly*, 33(6), pp. 1113-1127.