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**Using geo-narratives to explore the diverse temporalities of therapeutic landscapes:
perspectives from “green” and “blue” settings**

Sarah L. Bell^{*}, Benedict W. Wheeler^{*}, Cassandra Phoenix[†]

^{}European Centre for Environment and Human Health, University of Exeter Medical School*

[†]Department for Health, University of Bath

Abstract: A growing evidence base highlights “green” and “blue” spaces as examples of “therapeutic landscapes” incorporated into people’s lives to maintain a sense of wellbeing. A commonly overlooked dimension within this corpus of work concerns the dynamic nature of people’s therapeutic place assemblages over time. This article provides these novel temporal perspectives, drawing on the findings of an innovative three-stage interpretive geo-narrative study conducted in south-west England from May to November 2013, designed to explore the complex spatial-temporal ordering of people’s lives. Activity maps produced using accelerometer and Global Positioning system (GPS) data were used to guide in-depth geo-narrative interviews with 33 participants, followed by a subset of go-along interviews in therapeutic places deemed important by participants.

Concepts of “fleeting time”, “restorative time” and “biographical time” are used, alongside notions of individual agency, to examine participants’ green and blue space experiences in the context of the temporal structures characterising their everyday lives and the biographical experiences contributing to the perceived importance of such settings over time. In a culture that by and large prioritises speed, dominated by social ideals of, for example, the “productive worker” and the “good parent”, participants conveyed a desire to shift from “fleeting time” to “restorative time”, seeking a balance between embodied stillness

and therapeutic mobility. This was deemed particularly important during more stressful life transitions, such as parenthood, employment shifts and the onset of illness or impairment, when participants worked hard to tailor their therapeutic geographies to shifting wellbeing needs and priorities. *Key Words: blue space, geo-narratives, green space, individual agency, therapeutic landscapes.*

Introduction

A growing body of research suggests that time spent in so-called “green” and, more recently, “blue” spaces can promote human health and wellbeing (as reviewed by, for example, Hartig et al. 2014; Husk et al. 2016). These range from carefully landscaped, ‘manmade’ vegetated settings (such as parks, gardens, canals), to natural or semi-natural environments with less visible – though still active – human influence and management (including undeveloped coastlines, rivers and woodland settings). Much of this work aims to identify consistent and predictable relationships between these environments and human health, prioritising the agency of non-human elements in such environments to affect human health in ways that are detectable and measurable. These include components contributing to ill health (such as UV exposure, examined by Astell-Burt, Feng, and Holt, 2014a), and those thought to promote healthier lifestyles (e.g. physical activity), restoration from stress and fatigue, and social interaction (Kaplan, 1995; Herzog et al. 1997; Maas et al. 2009; Bowler et al. 2010; Thompson-Coon et al. 2011). Such studies tend to focus primarily on the materialities of these settings, often overlooking the role of individual agency in shaping how and why (if at all) people come to use and benefit from them (Bell et al. 2014). The use of the term ‘agency’ here refers to the capacity and inclination of individuals to make purposeful choices regarding the use of their local green and blue spaces, and to do so in a way that promotes

their personal sense of wellbeing, within the social and cultural contexts specific to their daily lives.

Where agency is considered, it is often in terms of deficit and inequality. For example, studies have examined the role of formal and informal power structures in shaping differential access to green and blue space (West-Newman, 2008; Boone et al. 2009; Byrne, 2012), and in promoting specific cultural representations of how to perceive and “be” within such settings; whilst these dominant representations may resonate with the priorities of certain groups in society, studies suggest they risk alienating others, including those within minority ethnic groups (Matless, 1998; Neal and Aygeman, 2006; Tolia Kelly, 2006) and those living with chronic illness or impairment (Macpherson, 2009; Thomas, 2015). There is therefore a need for more detailed insights into the complexities of how people in different life circumstances (e.g. with varied family and employment structures, health and mobility) choose to integrate different green and blue spaces into their daily lives and routines (or otherwise), and the extent to which such interactions are perceived to meet their shifting needs and wellbeing priorities over time. We respond to this gap in the literature here, drawing on a mixed method, interpretive study conducted in the south west of England.

Personal conceptions of wellbeing and notions of individual agency are given more consideration (implicitly if not explicitly) within the growing body of literature on “therapeutic landscapes”. These were originally described as landscapes “where the physical and built environments, social conditions and human perceptions combine to produce an atmosphere which is conducive to healing” (Gesler, 1996: 96). Much of the early therapeutic landscapes research focused on rarely encountered extraordinary places of healing, such as sacred pilgrimage sites, holy wells and springs (e.g. Gesler, 1993, 1996), looking to identify intrinsic therapeutic qualities. Later studies, however, broadened the concept to examine everyday settings able to contribute to ill health *prevention* as well as healing, exploring how

dynamic material, social, cultural and personal assemblages entwine to shape a sense of wellbeing at particular times and for certain individuals/groups (Foley, 2014). These “ordinary” everyday assemblages, deemed integral to the routine self-management of individual wellbeing over time (Willis, 2009), include for example: community gardens, coastlines, woodland and riverside environments (Milligan, Gatrell, and Bingley, 2004; Milligan, Bingley, and Gattrell, 2005; Milligan and Bingley, 2007; Völker and Kistemann, 2013; Bell et al. 2015b), as well as indoor/built assemblages such as the public library, community-based heritage, and sites of social enterprise (Brewster, 2014; Munoz et al. 2015; Power and Smyth, 2016). Several therapeutic qualities have been identified across these studies, including opportunities for: *meaningful activity*, such as learning, play and physical activity; *embodied restoration*, characterised by experiences of retreat, relaxation and reflection; *sociality*, where friendships and relationships are built; and *safety*, with supportive local social networks, for example, offering a sense of security, inclusion and belonging over time (Smyth, 2005; Cattell et al. 2008; Sampson and Gifford, 2010; Doughty, 2013).

Studies have also touched on the therapeutic *temporal rhythms* of certain settings, such as “countryside retreat” experiences, whereby city dwellers are encouraged to connect to the slower pace of “nature time” to experience respite from the rapid and often conflicting rhythms perceived to characterise more routinely encountered built environments (Conradson, 2007). Reference has been made to the “deeper” sense of time gained in relatively natural environments, in part through the stable, cyclical nature of change in such environments, where rhythms associated with the seasons, tides and the diurnal cycle are conveyed through changing ambient conditions and associated responses of animal and plant life (Macnaghten and Urry, 2000). These subtle shifts are harder to detect within built areas characterised by manmade structures designed to maximise human comfort and productivity regardless of ambient environmental conditions (Edensor, 2000). Slower place rhythms are

thought to provide opportunities for “stillness”, be it stillness of the body through pleasurable multisensory immersion or stillness of the mind through movement, experiencing emotional transitions whilst transitioning through space; a form of “therapeutic mobility” (Gatrell, 2013; Bell et al. 2015b). This article builds on this work, exploring how the complex temporal structures encountered in people’s day-to-day lives shape their conceptions of different green and blue space experiences as therapeutic or otherwise.

With the plethora of environments examined over the last few years, researchers have increasingly recognised the highly personal and cultural factors driving people’s construction of therapeutic landscapes. Indeed, Conradson (2005: 338) suggests they are best approached as “a relational outcome, as something that emerges through a complex set of transactions between a person and their broader socio-environmental setting”. As such, the “contested” or “ambivalent” nature of therapeutic landscapes has come to the fore; spaces perceived as relaxing, comforting or inspiring by one person could be experienced as risky or unsettling for another. For example, drawing on the findings of a qualitative study with 16 young people in the North West of England, Milligan and Bingley (2007) identified diverse reactions to woodlands. Some participants described experiences of renewal, reflection, familiarity, security, challenge and competence building in such spaces. However, others conveyed more negative perceptions of risk, intimidation, feelings of claustrophobia, and concerns about the uncleanness of woodland vegetation. Variations were linked to differing levels of childhood woodland exposure, which was in turn influenced by parental limits imposed on play spaces and the role of myth and media sensationalism in shaping cultural constructions of risk within such environments. Other studies have suggested that experiences of illness, injury or compromised mobility with advancing age can contribute to shifting meanings and experiences of wellbeing in the same settings over time (Milligan, Gatrell, and Bingley, 2004; Milligan, Bingley, and Gattrell, 2005; Coleman and Kearns, 2015). Exploring the importance

of social and emotional pathways to wellbeing, Smaldone, Harris, and Sanyal (2005: 403) highlight how specific places come to be valued, or conversely avoided, as “a marker for certain life experiences and stages... a container and reminder of that part of one’s life”. In this way, places can be comforting and reassuring, or painful and emotionally challenging, depending on the experiences and relationships with which they are associated.

Taken together, these studies suggest value in gaining a deeper understanding of the processes by which different settings come to be experienced as therapeutic or otherwise; how, for example, might such perceptions be shaped by the intersection of people’s past experiences and current life circumstances? To what extent do routine taken-for-granted place interactions become “therapeutic” or “contested” as people negotiate specific life transitions? This article seeks to address such questions in order to advance existing understanding of the dynamic nature of people’s therapeutic place assemblages over time. Using notions of individual agency, we examine the multiple and interlinked *temporal* qualities of people’s routine green and blue space-based therapeutic geographies. We set this in the context of the spatial-temporal structures that characterise their everyday lives and the biographical experiences that contribute to the perceived importance of such settings in their whole lives.

To do so, the article is structured around concepts of “fleeting time”, “restorative time” and “biographical time”. In part, these experiences of time relate to “calendar” or “Newtonian clock” time, which tends to govern many of our everyday routines (Murray, 2000). However, this quantifiable unit of time exists alongside a number of less tangible temporal structures, such as perceived time (our subjective sense of time passing, which may be “fleeting” or slower and more “restorative”) and biographical time (the collection of lifetime experiences that contribute to our sense of self – Phoenix, Smith, and Sparkes, 2007; Richardson, Ong, and Sim, 2008). These are examined, together with the role of individual

agency, to understand how and why people experience a sense of wellbeing (or otherwise) from diverse green and blue space assemblages. This may be momentarily whilst weaving through the spatial patterns of daily life, or over the longer-term whilst negotiating and adapting to diverse life transitions, such as relationship changes, parenthood, relocation and the onset of impairment or illness.

The geo-narrative approach

In what follows, we introduce the in-depth interpretive geo-narrative approach that underpins this research; an approach designed as part of a larger research project (see Bell et al. 2015a, b) in order to better understand the spatial-temporal ordering of people's lives, and the implications of this for the ways in which diverse therapeutic geographies are constructed and experienced. The project was guided by three research questions: (1) What characterises participants' green and blue space wellbeing experiences? (2) What is the relative importance of different green and blue spaces for wellbeing amongst participants and why? (3) How do current life circumstances and prior place experiences shape the perceived importance of green and blue spaces as wellbeing resources or otherwise? In this article, we focus on findings pertaining to the third research question, building on two earlier articles that have examined how and why specific material, social, cultural and affective features of these settings converge to promote a sense of wellbeing (addressing Research Questions 1 and 2, see Bell et al. 2015b, forthcoming).

The study data were collected within the south west of England from May to November 2013. A purposive sample (Patton, 1990) of 33 participants were recruited from two coastal towns in Cornwall, south west of England, following the delivery of study information sheets and recruitment screening questionnaires to all households within four

neighbourhoods, each with comparable green space coverage. Two socio-economically distinct areas per town were selected, whose boundaries were defined according to Lower Layer Super Output Areas (LSOAs, an administrative unit used in England and Wales). During the recruitment process, participants were asked how they interact with their “local environment” for “health and/or happiness”. Care was taken not to indicate a focus specifically on green or blue spaces at this stage so as to avoid the recruitment solely of green or blue space enthusiasts. However, the environmental connotations of the term “local environment” are acknowledged. The first respondents to return their screening questionnaires were recruited, provided they met the criteria outlined within a pre-defined purposive sampling matrix.

In order to capture insights into the perceived value of green and blue spaces for wellbeing across a diversity of everyday experiences, the purposive sampling matrix encompassed variations in green, blue and built space engagement, gender and life circumstances. Recruited individuals were aged between 25 and 85 years old (with a median age of between 46 and 55); 20 female, 13 male; in full, part time employment or retired; with or without children; and included households with an annual income of less than £20,000 per year through to over £70,000. Informed consent was sought from all participants, and ethical approval for the study was granted by the University of Exeter Medical School Research Ethics Committee (Approval Reference: Jan13/B/002). The map data presented in this article have been selected to avoid indication of participant home or work locations.

Participants were asked to carry a GeneActiv accelerometer (measuring physical activity) and QStarz BT-Q1000XT Global Positioning System (GPS) receiver for one week (recording location at high spatial and temporal resolution). The resulting data were integrated and imported to geographical information system software in order to generate a series of personalised maps for each participant, providing a visual representation of their

daily movements and place interactions during the week, including how long they stayed in different places and how active they were. Each participant's maps were then used as visual prompts to guide an in-depth narrative interview, going through each map in sequence with participants to discuss how and why they engaged with different local environments to promote and maintain a sense of wellbeing, health and happiness, and how they felt this had changed over time. Active listening and open questioning techniques were used to explore the place narratives offered by participants in more detail, including the physical and social contexts of their place interactions, associated meanings and emotions, and any other places of personal importance to them (for positive or negative reasons) that were not depicted on their maps. In this way, a series of "geo-narratives" were produced (Kwan and Ding, 2008).

The final stage of the research included nine go-along interviews (Kusenbach, 2003) with a subset of participants, in places they visited on a routine basis and perceived as integral to their wellbeing. Interviewees were selected purposively to reflect a variety of life stages and social contexts, from interviews with a walker, swimmer and dog walker, to days out with two couples, two families, and a cross-generational indoor craft-based activity club. These "emplaced" interviews – conducted within the place of study – offered further insights into the lived experiences and relationships playing out within such places (Riley, 2010). By asking questions and observing, the researcher could examine participants' practices and interpretations in-situ (Carpiano, 2009). Reflecting participants' varied mobility capabilities and preferences (Macpherson, 2016), these interviews involved varying levels of movement (primarily walking) and pause.

Through exploring wellbeing in this way, the study contributes to a small but growing body of green and blue space research prioritising people's personal conceptions of wellbeing in relation to how and why they use and value diverse local environments (Skår, 2010; Ashbullby et al. 2013; Dinnie, Brown, and Morris, 2013). Capturing such in-depth accounts

can act to “restore agency to people whose experiences might otherwise be reduced – if not to numbers, then to researcher-imposed categories” (Milligan, Kearns, and Kyle, 2011: 8). This is important where standardised health and wellbeing measures, and conceptions of what constitutes ‘green’ and ‘blue’ space, fail to capture adequately the complexity, intensity or dynamism of participants’ lived experiences (Pinder, 2007).

Multiple phases of analysis were undertaken on the data collected (see Bell et al. 2015a for full details). Following the co-analysis of the geo-narrative maps with participants, the resulting verbatim interview transcripts were subject to in-depth narrative thematic analysis (Phoenix, Smith, and Sparkes, 2010). Six lenses – macro, meso, micro, interactional, spatial, temporal – were applied (see Pamphilon, 1999) to situate participants’ green and blue space experiences in the context of both their everyday lives and the complexities (personal, social, environmental) of their life histories. Patterns and themes recurring across participant accounts were also examined to understand variations in their wellbeing experiences according to: preferred green and blue space interactions; life circumstances and transitions; personal identities and relationships; and past place experiences. Whilst an inductive analytical approach was adopted, efforts were made to move back and forth iteratively between the data and the literature in order to consider participants’ narratives in relation to existing theoretical constructs of relevance to the fields of green/blue space, health, wellbeing, life course, and leisure research. Critical friends (colleagues and peers) were consulted to “broaden the scope of perception” (Norris, 1997) and a field diary was kept throughout for purposes of reflexivity and transparency (Tracy, 2010).

Findings and discussion

The innovative geo-narrative approach adopted within this study facilitated new perspectives on the multiple and interlinked temporalities that shape people's constructions of green and blue settings as "therapeutic" (conceptualised for the purposes of this study as both healing and health promoting). Using participants' GPS/accelerometer maps to focus interview discussion on their daily spatial-temporal routines, this approach allowed reflection on how green and blue spaces featured within both their deliberate meaningful place experiences as well as often overlooked habitual spatial practices of daily life (Peterson, 2013). In what follows, we draw on concepts of "fleeting time", "restorative time" and "biographical time" in order to present novel insights that situate participants' therapeutic green and blue space encounters in the context of the complex temporal structures that characterise their everyday routines (governed, for example, by work and domestic commitments) and the biographical experiences that influence their sense of connection to these settings over time.

Fleeting time

Growing concerns have been raised in the literature about the deleterious health effects of the "devouring tyrant" of clock time (Murray, 2000: 59). People are living fast-forwarded lives within a culture that by and large prioritises speed and productivity (Conradson, 2007), treating time literally as money (Rittman et al. 2004). As such, a busy life (often characterised by "over work") has become symbolic of a "full" one (Southerton, 2003), where time is frequently experienced as scarce or "fleeting". Indeed, being "too busy" at work or home is one of the most frequently cited reasons given for *not* visiting natural environments in a large nature engagement survey in England (Natural England, 2015a).

Restrictive experiences of “fleeting time” were apparent across participant narratives, particularly amongst those facing a time and income “double jeopardy”; working long hours at a low salary and therefore unable to relieve their time deficits with high cost convenience goods or strategies (Strazdins et al. 2011). For these participants, access to green and blue spaces was seen as a luxury, and value was placed on those (e.g. urban parks, green trails) that could easily be incorporated within the time-pressured contexts of their daily routines. This is illustrated in Yvette’s geo-narrative extracts in Figure 1.

Figure 1. Seeking a compensatory ‘green fix’

Yvette and her husband had moved to the study site from the surrounding countryside approximately two years prior to the interview, following a significant drop in their combined income. Since then, they had been working longer hours (due to lower pay rates), leaving limited time or energy for the long woodland walks they used to enjoy together. Building on positive childhood experiences (described in Box 1, Figure 1), Yvette expressed a strong

sense of attachment to woodland settings, suggesting they bring her glimpses of the “freedom” she felt as a child (see also O’Brien, Morris, and Stewart, 2014). Since moving to the town, she explained her efforts to deliberately incorporate urban green spaces whilst doing other errands, even if fleetingly. In Box 2, Figure 1, she highlights how walking through the old cemetery park en-route into town gives her a “fix of greenery”, which she feels she previously took for granted when living in the countryside, describing this process as “a sort of compensation”. However, she admits that it is a less intense feeling than that experienced during longer woodland walks; “it is quite short-lived and so you don’t quite get into it, don’t quite hit the zone!” Nonetheless, a period of depression after the move had encouraged her to appreciate the “small things” within these urban green settings, making the most of the nature available:

Yvette: “If you are looking for beauty or peace of mind you can find it – it can be in very small things like spotting a bird in a hedge poking about, or spotting some other people laughing or enjoying something and allowing their joy to let you think there is joy around and let it fill your spirit”

Appreciating such phenomena has previously been described as “a coping strategy when feeling overwhelmed by anticipated occupations and demands” (Pemberton and Cox, 2014: 497), enabling people to focus on the present time, rather than worrying about impending pressures. Through deliberately integrating these urban green spaces into her routine and purposefully seeking out sources of pleasure within them, Yvette illustrates a form of “adaptive agency”; a term that refers to the “adaptive optimising strategies” (Wiles et al. 2009) used by participants to deal with structural changes encountered in their everyday lives (in Yvette’s case, her urban relocation and decrease in household income).

The geo-narratives of other study participants conveyed the need to consider the role of “relational agency” (Gergen, 2009) in shaping the temporal structures that governed their

routine spatial practices and opportunities to integrate therapeutic experiences into shared “timetables”. For example, participants with young children experienced harried “hot spots” during the week, often trying to squeeze too many activities into allocated time slots in an effort to coordinate their schedules with those of their immediate family networks (Southerton, 2003). This resulted in “pressured time”, where time is “consumed and rationed out” to fulfil expected social roles and identities (Phoenix, Smith, and Sparkes, 2007: 240). Through quantification, clock time has segmented everyday life in this way (Daly, 2001), with cultural values often shaping perceptions about the “appropriate” allocation of scarce time resources across these segments. The visual maps informing the geo-narrative interviews provided a valuable springboard to discussion about this process of time allocation, encouraging reflection about how and why hot spots occur and how participants seek to cope with them. These hot spots were particularly apparent in the maps of participants with young children. For example, in Box 1, Figure 2, Tess (working part time with two children, aged two and four) explains that many of her daily routines outside of her paid working hours revolve around the structured activities of the children, including day care, extra-curricular activities (swimming classes and ballet) and protected “family time” slots, such as their Sunday morning swim.

Figure 2. “Hot spots” in the working family context

In Box 1, Figure 2, Tess hints at feelings of guilt about the lack of structure to their weekend afternoon family activities, reflecting cultural ideals about “good parenting”; that a good parent prioritises structured activities catering for their child(ren)’s material, physical, emotional, psychological and intellectual development needs (Shaw, 2008). As such, whilst parents may need the type of “down time” that Tess describes, they feel obliged to engage in more purposive family leisure: “family leisure is not seen by parents as simply having fun together with their children (i.e. enjoying leisure), but as a highly significant part of child-rearing through which children will be exposed to a range of positive developmental influences” (Shaw, 2008: 698).

As illustrated in Tess’ accounts of buggy fit in Box 2, Figure 2, however, parents in the study also conveyed a sense of “temporal agency” in balancing these structured family

activities with personal green and blue space hobbies, helping them to address, at least in part, their own wellbeing needs. Although perceived in some ways as “deviant” or transgressive, this “time work” offered participants a greater sense of control in the face of “external sources of temporal constraint or structure” (Flaherty, 2012: 250). Tess describes how her buggy fit instructor uses green and blue space features at the local beach to help parents build their personal fitness without the need to find childcare. Having temporarily stopped going to the class when her youngest child (Benny) was born, she explained how the sessions had since been adapted to cater for children of different ages. By the time of her go-along interview (three months later), Tess had resumed the classes, with Benny mimicking the calf raises he had seen them doing along the beach promenade the day before. For Tess, this activity constituted a therapeutic mobility, allowing her to maintain an important aspect of her personal identity (being physically active) despite adopting the additional, time-intensive and often highly scrutinised social role of parenthood; a life transition that is widely recognised as both “pivotal” and “transformative” in the life course (Umberson, 2010: 614). Through maximising opportunities to use their local green and blue spaces, Tess and other parents in the study felt more equipped to negotiate the “hot spots” that dominated many of their everyday routines. Taken together, the experiences of Tess and Yvette demonstrate the challenges of integrating therapeutic green and blue space experiences into work and/or domestic schedules dominated by fleeting time and characterised by multiple competing pressures.

Restorative time

The pressures of a life governed by fleeting time led many participants to maximise opportunities to engage in new green and blue space practices that promoted alternative (often slower) perceptions of time and “more restful psycho-social states” (Conradson, 2007:

35); a form of rejuvenating or “restorative time”. Participants adopted a variety of strategies to shift their focus away from the somewhat frustrating experiences of fleeting time, valuing sensations of therapeutic immersion in what has previously been termed “kairos”: “that rewarding involvement in life during which we lose the sense of time passing” (Murray, 2000: 61). Sometimes these immersive activities appeared as a cluster of dots in one location (a physical “stillness”) within participants’ geo-narrative maps (for example, see Figure 4), whilst at other times they corresponded to a particular movement (a form of “therapeutic mobility”). These activities constituted a purposeful change of pace, imbuing participants with a sense of temporal agency and allowing them to slow down and experience the therapeutic pleasures of embodied restoration.

The opportunity to slow down and gain a sense of being present in (and attentive to) the world was often simply about participants allowing themselves to take an hour out of an otherwise busy day to go somewhere characterised by more relaxed temporal rhythms. For example, participants explained how the sights, sounds and movements of certain types of wildlife offered opportunities for relaxation in their local parks, woodlands, allotments and fields (see Bell et al. forthcoming) although, for many, this was superseded by the affective power of the coast. This included the captivating motion and sounds of breaking waves, boats bobbing up and down, cyclical changes created by the tides, and moments of intensity created by the patterns of light hitting the water (Bell et al. 2015b). In the extract below, Bill emphasises the value of being able to engage with these coastal rhythms from the vantage point of a nearby headland during particularly intense phases of early parenthood:

Bill: “Young children absorb you completely, so I think between birth and seven, you know, you’re very intensely involved at home and there is this crying need at that point, and one would sometimes just drive down to Castle

Drive to the Point [the headland] and sit in the car and look at the sea for an hour, just for some sanity”.

The importance of finding therapeutic settings or activities that allow the tensions of the day to dissipate recurred across participants’ narratives, particularly amongst those balancing intense work and domestic commitments. As noted by Rönkä and Korvela (2009: 90-91), “daily life includes repeated routines and hassles that may evolve emotions... each family member takes home experiences from the life spheres they are involved in”, be it work or school etc. This creates a family “rush hour” which can be loaded with negative emotions as each brings home the fatigue, frustration or anger from their day. Such emotions can “spill over” to others, negatively affecting the household atmosphere and dynamic. For some, this could be averted, however, through “emotional work”; actions taken to pause the day’s momentum and filter negative emotions before returning home. Many participants sought out opportunities for embodied immersion in their local green and blue spaces to facilitate this emotional work, be it alone, or by meeting family members and taking the time to “change gear” together. This is conveyed in Figure 3, in which Dean describes an afterschool visit with his teenage daughter to what he called his “back garden” beach, just a “two minute drive” from home.

Figure 3. Dissipating the day's emotions at the local beach

In Figure 3, Dean explains how both visual and embodied haptic immersion in the coastal atmosphere contributes to his experiences of “restorative time”. He describes how the buoyancy of the water gives his limbs a much-needed sense of rejuvenation from everyday restrictions whilst swimming, offering him a greater range of movement. This is something he had struggled to experience elsewhere for six years due to the bodily discomfort caused by long-term restrictive hip pain; an added source of frustration for Dean to regulate on a day-to-day basis. Through appealing to Dean’s creative imagination (*“I sort of want to feel like a fish”*) and offering physical relief, swimming was a form of therapeutic mobility, contributing to experiences of cognitive and physical relief, embracing his mind and body in a way that felt “gently enabling” (Foley and Kistemann, 2014: 4).

Notably, Dean recalls a lack of interest in the coast as a child (Box 1 Figure 3), feeling a much greater sense of belonging to woodland spaces. He attributed this primarily to fond childhood memories of family gatherings in two wooded parklands near his family home in London. In contrast, his childhood coastal memories were largely negative; since his family had lived too far away from the sea to go on a regular basis, they only tended to visit in the holidays, during which he was forced to wear sun cream, to which he indicates a powerful sensory aversion. Nonetheless, after learning to drive upon moving to Cornwall, he began to appreciate the coast as an easily accessible local space in which he and his daughter could spend time together, taking a sketch book, swimming or sitting quietly, tuning into the slower multisensory rhythms of the coast and enjoying a shared sense of relaxation. This highlights how the “contested” nature of therapeutic assemblages can change over time, with shifts in personal wellbeing priorities and needs, often in the context of changing relationships through the life course. It also contributes to the relatively limited literature exploring the “geographies of family life as it pertains to the therapeutic landscape concept” (Williams, 2007: 6).

Biographical time

Apparent throughout the examples presented thus far is the importance of recalled past place experiences (“*biographical time*”) in shaping the degree to which participants constructed, appreciated and proactively sought out therapeutic experiences within their local green and blue spaces. The geo-narrative approach provided novel insights into these biographical temporal dimensions through asking participants to visualise and reflect upon how their maps might have looked different at previous life stages, and to discuss the extent to which they had come to value the local green and blue settings in which they were choosing to spend time. This allowed deeper consideration of how and why both routine and

more infrequently visited settings became therapeutic, ambiguous or contested as participants negotiated different life transitions.

Many participants emphasised the importance of childhood place experiences in shaping their feelings of belonging and therapeutic place preferences in adulthood (with Tess explaining that she has always chosen to live near water since growing up by the sea, and Yvette and Dean expressing a strong and sustained sense of connection to woodlands since childhood). This aligns with the findings of existing research (e.g. Milligan and Bingley, 2007; Ward Thompson, Aspinall, and Montarzino, 2008; Windhorst and Williams, 2015) in highlighting how childhood green/blue space experiences can start processes of green/blue space “acculturation” (Asah, Bengston, and Westphal, 2012), with many participants integrating such spaces into their wellbeing practices from a young age. However, the findings also *extend* the observations of these earlier studies by emphasising the potential to appreciate new green/blue space assemblages later in life, particularly as personal expectations, wellbeing priorities and opportunities shifted in the context of specific life events and transitions. In this study, these included, for example, employment changes and relocation (e.g. Yvette and Dean’s new found appreciation for urban green spaces and beaches, respectively), relationship changes and parenthood (e.g. Tess’ enjoyment of buggy fit at her local beach and Bill’s need to watch the sea from the local headland for some respite during early parenthood).

Significant biographical shifts in how and why specific green and blue settings were valued are particularly apparent within Maggie’s geo-narratives; a participant living with a severe physical disability as a direct result of a diving accident at the coast. Whilst that particular coastal interaction had lasting negative repercussions for her physical wellbeing, Maggie still expresses strong emotional connections to the sea (rooted in childhood), but describes clear shifts in how she now engages with it (Box 1, Figure 4). Although she will no

longer enter the water and cannot pursue many of the fast-paced active therapeutic mobilities that she had previously enjoyed (body boarding, diving, walking the coastal path), she articulates a deep sense of appreciation for the relaxing multisensory immersion encountered at the coast, noting the sounds, the salty smells, the motion of the sea and the taste of ice-cream (Box 2, Figure 4).

Figure 4. Finding a slower pace of engagement with valued natural settings

Maggie's accident illustrates a form of what Bury (1982) terms "biographical disruption", whereby specific life events can lead to the disruption of "the structures of everyday life" and its taken-for-granted features, assumptions, behaviours and temporalities (Williams, 2000: 43). During her interview, Maggie touched on the challenges of maintaining a coherent sense of self through such a transformative life transition. She had previously

worked in a physically active profession (walking about ten miles per day) and had enjoyed an active “outdoorsy” lifestyle, both of which were severely compromised by the accident. Although she felt that living beside the coast contributes to her feelings of belonging and stability in general, she highlighted the site of the diving accident as somewhere painful that she now purposefully avoids (Box 3, Figure 4). Reflecting a form of “adaptive agency”, however, Maggie and her husband still chose to visit more accessible parts of the coast regularly with her mobility chair. They had also constructed alternative, shared therapeutic geographies, from meandering around public gardens to taking part in clay pigeon shooting, bringing feelings of both pleasure and achievement. This conveys a process of “biographical repair” (Sanderson, 2011: 619), with Maggie identifying new forms of therapeutic nature-based immersion that enable her to maintain links to previous passions and preferences, albeit at a slower pace and in different forms.

Whilst Maggie, Yvette, Tess and Dean indicated some form of nature connection as a child, other participants explained how they had come to enjoy green/blue settings after very limited childhood nature engagement. This differs from the findings of existing studies (e.g. Ward Thompson et al. 2005; Ward Thompson, Aspinall, and Montarzino, 2008), in suggesting that childhood nature experiences *need not* be a prerequisite for adulthood use and enjoyment of these settings. For example, one participant, Sally, had spent the first 30 years of her life in Central London, with no garden and very little awareness of the nature present in London’s urban green spaces. Following a long weekend break in Cornwall with her parents in 2002, Sally decided to move there for a significant life style change. She described her London life as “very high pressured, 12-hour days [at work]... a lot of boozing, drinking... and then coffee, coffee, coffee, coffee, coffee!” Having grown increasingly “sick and tired of London” and concerned about the deleterious health effects of temporal routines dominated by restrictive pressured time, Sally explained how the slower pace of life in

Cornwall had gradually helped her to relax and take the time to appreciate her surroundings. She particularly valued the peace, stillness and sense of temporal perspective afforded by her local woodland and coastal walks.

Sally: “Engaging with nature, I didn’t get it in London...I respect it for what it gives me now, which is peace and time to walk through it and look at it and enjoy it... I look at the trees and the plants and, you know, you look at some trees and how big they are and you think ‘God they’re like hundreds of years old, you know, they were here when like Queen Elizabeth (I) was!’”

Taken together, these participant narratives emphasise the importance of exploring the role of adulthood life transitions, and associated “biographical disruptions”, in shaping people’s green and blue space awareness, use and experiences. This reflects recent calls in the literature to understand which green (and blue) spaces matter at different stages in life and why (Astell-Burt, Mitchell, and Hartig, 2014b). Importantly, however, participant narratives suggest the need to recognise identities and preferences as fluid and relational in terms of their influence on people’s therapeutic place constructions over time.

The importance of individual agency in shaping therapeutic geographies

As illustrated throughout this article, conceptual ideas relating to the interface between structure and agency (Kearns and Andrews, 2010) are useful in unpacking the influence of different life transitions on the temporal qualities of people’s green and blue space therapeutic geographies. Structural influences were observed here at the national level (e.g. cultural ideals of productivity and good parenting), the local level (e.g. changes in the types of spaces available to participants upon relocation), and at the household level (e.g. with new responsibilities or time scarcity linked to employment changes, parenthood etc.).

Participants often conveyed a sense of agency in responding to these structural changes, which allowed them to balance new social roles and associated identities (e.g. as parents) with longer-standing identities and interests (e.g. being active, “outdoorsy”, nature-oriented).

Three particular types of agency were apparent within this analysis. The first, “temporal agency” (Flaherty, 2012) reflects efforts made by participants (e.g. Tess) to reclaim control over their temporal experiences whilst negotiating new sources of temporal constraint or structure (e.g. when trying to co-ordinate the divergent schedules of family members in parenthood). Linked to this, “relational agency” recognises that everyday choices are often made within the changing context of relationships (Gergen, 2009). Interactions with local green and blue settings can therefore fluctuate according to new shared needs, capabilities and preferences emerging as a result of these relationships. In this way, people’s activities can be significantly affected by the events and transitions occurring in the lives of “linked others”, as well as by personal life trajectories (Grenier, 2012). Participants often explained how adopting new roles within relationships temporarily influenced their opportunities to interact with certain green or blue spaces as they used to (e.g. Tess in parenthood). This was through, for example, a lack of time or energy and sense of pressure to adhere to cultural ideals.

The third, “adaptive agency”, describes the various strategies used by participants to maximise opportunities to engage in appealing wellbeing practices in response to the personal, temporal, structural and relational changes occurring in their lives. Such strategies included making the most of locally available spaces that could easily be incorporated within the daily routine (e.g. the urban cemetery park for Yvette, the local beach for Dean and his daughter), prioritising green/blue space hobbies that could be accommodated alongside participants’ work and childcare commitments (e.g. Tess’ buggy fit classes), and identifying local green and blue spaces offering a point of connection to previous selves even if

compromised personal mobility necessitated an alternative form of engagement (e.g. Maggie's appreciation of the immersive multisensory experiences encountered at her local beach). Drawing on these notions of agency, this article has offered novel insights regarding the intersection of people's past experiences and current life circumstances in shaping how and why different green and blue spaces come to be experienced as therapeutic or otherwise.

Conclusions

In this article, we have focused on notions of temporality and individual agency to extend and deepen existing understanding of how and why different green and blue spaces feature within the therapeutic assemblages constructed by people in the shifting contexts of their everyday and whole lives. Building on a growing interest in the fine-grained spatial details of people's everyday activities (e.g. Kwan and Ding, 2008; Preston and Wilson, 2014; Schwanen and Wang, 2014), the innovative geo-narrative approach underpinning this research has provided unique insights into previously under-theorised spatio-temporal qualities of people's therapeutic geographies. Engaging participants in the interpretation of their own GPS/accelerometer maps encouraged reflection and rich descriptions about the ways in which varied green and blue spaces featured within deliberate place visits and more mundane habitual spatial practices, offering opportunities for both embodied stillness and diverse therapeutic mobilities.

Drawing on participants' narratives, we have focused on the interlinked temporal structures of "fleeting time", "restorative time" and "biographical time" to advance knowledge regarding the ways in which particular green and blue settings served to shift participants' focus from the "tyranny" of pressured or fleeting time, to slower more restorative and self-nourishing rhythms. This occurred both momentarily (for example, whilst

walking through urban parks) in the course of carrying out domestic errands, and by deliberately taking time out to experience the dynamics of diverse green and blue spaces (with particular value placed on woodland and undeveloped coastal settings). Through allowing the mind and body to temporarily escape from pressured time in this way, study participants were able to perform important “emotion work”, proactively regulating and trying to dissipate negative emotions before they escalate or spill over into other spheres of their everyday lives.

The need for this emotion work was particularly apparent at certain life stages, especially in relation to the challenges of “over-work” (e.g. Yvette), the intensity of early parenthood (e.g. Tess, Bill), and the frustrations of learning to live with long-term physical mobility restrictions (e.g. Dean, Maggie). The importance of these life events and transitions in shaping people’s green and blue space interactions has been largely overlooked within the literature to date (Astell-Burt, Mitchell, and Hartig, 2014b; Bell et al. 2014). Yet, as this study has shown, these shifts can have significant repercussions for people’s everyday and longer-term green/blue space choices, contributing to the “contested” or “ambivalent” nature of people’s therapeutic geographies. Whilst major life events can undermine the perceived therapeutic potential of a setting (such as Maggie’s avoidance of a previously valued coastal site after a severe diving accident), other transitions may reconfigure personal preferences and priorities such that previously disliked or unremarkable settings become integral to efforts to maintain an (often shared) sense of wellbeing over time (e.g. Dean’s new-found appreciation for his “back garden beach” in promoting opportunities to spend “restorative time” with his daughter following relocation to Cornwall from London). These types of insights are important if we are to maximise the likely success of policy efforts to enhance the provision and quality of natural spaces, and access to them, within rural and urban communities. Moving beyond the focus solely on childhood experiences, this study illustrates

how such choices are influenced by dynamic and evolving wellbeing priorities, socio-cultural values, and green/blue space engagement opportunities.

Although somewhat resource-intensive and therefore limited to small sample sizes, the geo-narrative approach developed in this study could be used in future studies to provide further insights into the temporal dimensions of people's therapeutic green and blue space experiences. These studies would benefit from building in a longitudinal component amongst those undergoing specific life transitions, and recruiting individuals from more diverse cultural backgrounds. This could enable further identification of the complex cultural and relational drivers behind observed wellbeing place preferences, and the inter-subjective temporal qualities of different green and blue space experiences over time, focusing on residents of communities characterised by different types of green, blue and built environments (e.g. rural versus city dwellers, or people moving between the two). In-depth interviews with couples and families would be of value here (e.g. Ashbullby et al. 2013) in order to gain a more comprehensive understanding of shared meanings and temporal experiences, and the ways in which wellbeing practices shift and evolve through the generations.

This research responds to recent policy calls to better understand how and why societal and cultural changes, and shifting population structures (particularly with regards to ageing), may impact on people's use and engagement with the natural environment (Natural England, 2015b). Through providing a more sophisticated understanding of the ways in which people relate to their local green and blue spaces – for health, wellbeing or otherwise – over time, this type of research can inform the efforts of environmental planning and public health professionals to facilitate meaningful nature experiences amongst communities with mixed and shifting demographics. This will require a flexible, responsive approach to green and blue space design and management; a priority that has also been emphasised (see Natural

England, 2015c) in response to the ecological challenges anticipated with ongoing and future climate change. Importantly, it also poses critical questions for recent policy and practice initiatives, such as the resurgence of interest in “green prescriptions” and the plethora of initiatives designed to connect people to nature (e.g. the UK’s “Project Wildthing” and the David Suzuki Foundation “30x30 Nature Challenge”). These initiatives need to recognise and cater for the multiplicity of ways in which people come to experience a sense of wellbeing in nature (or otherwise) rather than promoting overly narrow prescriptive “doses” of nature engagement, and to explore avenues for addressing the challenges of integrating such “green prescriptions” within the complex temporal structures routinely negotiated by people in their daily lives.

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SARAH BELL is an Associate Research Fellow at the European Centre for Environment and Human Health, University of Exeter Medical School, Truro, TR1 3AE. Email:

sarah.bell@exeter.ac.uk. Her research interests include the development of innovative qualitative methods to understand the complex intersections between diverse 'natural' environments, health and wellbeing through the life course.

BENEDICT WHEELER is a Senior Research Fellow at the European Centre for Environment and Human Health at the University of Exeter Medical School, Truro, TR1 3HD. Email: b.w.wheeler@exeter.ac.uk. He is a health geographer and environmental epidemiologist, specialising in the use of GIS to work with health and environmental data to investigate environmental impacts on human health.

CASSANDRA PHOENIX is a Reader in Critical Health Psychology in the Department for Health, University of Bath, Bath, BA2 7AY. Email: c.phoenix@bath.ac.uk. She specialises in the use of narrative approaches, visual methods and ethnographic techniques to understand what it means to 'age well' in a variety of contexts across the life course.