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# Defining the West of England's *Genius Loci*: 'Land of Limestone and Levels' to Lateral Thinking

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#### Abstract

The County of Avon in England was abolished in 1996 and replaced by four unitary planning authorities. Recently the authorities have been working closely to develop a West of England Joint Spatial Plan to facilitate better integration of policies on transport, housing, the environment etc. The Joint Spatial Plan team commissioned a multidisciplinary study to investigate whether the West of England has special characteristics of 'place' that engender shared interest and regional affinity, i.e. 'sense of place', to which emerging planning policies might positively respond. In this regard the present article is particularly focused on identifying whether the West of England has unique and unifying landscape characteristics, relating to topography, rural scenery, and flora and fauna, which combine with human experiences to distinguish the Region from adjoining areas. It is concluded that the West of England does indeed have real geographical integrity, being bound on all sides by attractive and prominent landscape features - the Mendip Hills, Cotswold Hills and Severn Estuary – that contribute to a sense of identity and belonging among its inhabitants. The alternating limestone ridges and broad clay vales that prevail across the Region's heart, combined with low lying flatlands on the Region's western fringe, provide further contrast with neighbouring regions, reinforcing the emotional bond to the landscape. Furthermore, it is suggested that the inhabitants of the West England show a particularly special environmental consciousness that sets them apart from neighbouring populations, complementing the influence of the physical environment in making the Region a special place to live.



#### Subject Areas

Genius Loci; place-making; landscape; Land of Limestone and Levels; West of England; Mendip Hills; Cotswold Hills; Bristol, Bath; environmental psyche; Severn Estuary

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# Defining the West of England's Genius Loci: 'Land of Limestone and Levels' to Lateral Thinking

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#### **Abstract**

The County of Avon in England was abolished in 1996 and replaced by four unitary planning authorities. Recently the authorities have been working closely to develop a West of England Joint Spatial Plan to facilitate better integration of policies on transport, housing, the environment etc. The Joint Spatial Plan team commissioned a multidisciplinary study to investigate whether the West of England has special characteristics of 'place' that engender shared interest and regional affinity, i.e. 'sense of place', to which emerging planning policies might positively respond. In this regard the present article is particularly focused on identifying whether the West of England has unique and unifying landscape characteristics, relating to topography, rural scenery, and flora and fauna, which combine with human experiences to distinguish the Region from adjoining areas. It is concluded that the West of England does indeed have real geographical integrity, being bound on all sides by attractive and prominent landscape features - the Mendip Hills, Cotswold Hills and Severn Estuary - that contribute to a sense of identity and belonging among its inhabitants. The alternating limestone ridges and broad clay vales that prevail across the Region's heart, combined with low lying flatlands on the Region's western fringe, provide further contrast with neighbouring regions, reinforcing the emotional bond to the landscape. Furthermore, it is suggested that the inhabitants of the West England show a particularly special environmental consciousness that sets them apart from neighbouring populations, complementing the influence of the physical environment in making the Region a special place to live.

**Keywords:** Genius Loci; place-making; landscape; Land of Limestone and Levels; West of England; Mendip Hills; Cotswold Hills; Bristol, Bath; environmental psyche; Severn Estuary

#### Introduction

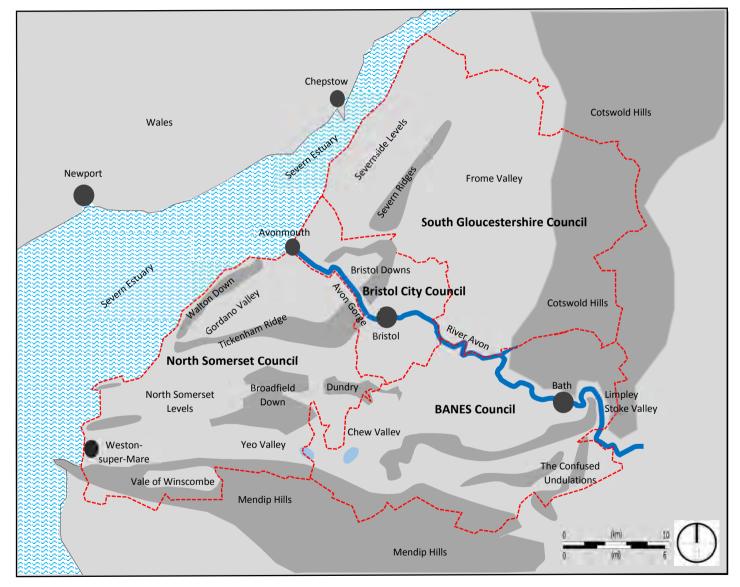
'Before it can ever be a repose for the senses, landscape is the work of the mind. Its scenery is built up as much from strata of memory as from layers of rock...it is our shaping and perception that makes the difference between raw matter and landscape' (Schama, 1995).

## **Background**

The appellation 'West of England' is typically used to describe the English region covered by the former county of Avon, which spans the northern and southern extremities of the ceremonial counties of Somerset and Gloucestershire respectively (Figure 1). The West of England (hereafter also referred to as 'the Region') covers an area of 1,343 km²; a similar size to Greater London (1,572km²). It is approximately 100 miles west of London and has a population of 1.1 million. The West of England includes two major and relatively affluent cities – Bristol, and the World Heritage City of Bath. Bristol, which sits at the heart of the Region, has a population of c. 440,000, while Bath has population of c.



Figure 1. West of England Region and key landscape features



89,000. Although urban coverage is quite high at around 20%, much of the rural farmed landscape surrounding the Region's settlements has much ecological and landscape merit as we will expand on here.

Avon was abolished in 1996 and replaced by the four unitary planning authorities of Bath and North East Somerset (BANES), Bristol City, North Somerset and South Gloucestershire. Recently the four authorities have been working closely to develop a West of England Joint Spatial Plan and Joint Transport Study, which will facilitate better integration of policies on transport, housing, the environment etc. With the exception of North Somerset, the councils also voted to approve the Parliamentary Order for the West of England devolution deal, establishing the West of England Combined Authority, which has its own mayor and greater autonomy over spending.

#### Genius Loci

In spite of the homogenising effects of globalisation, many people have a powerful sense of pride and identity in their location, believing that they are part of something that is distinct and immediately recognizable to a visitor (Hummon, 1992; Low & Altman, 1992). The expression 'sense of place' is often used to describe such attachment and belonging, i.e. where 'spaces become places' (Stedman, 2003). Given such perceptions the West of England Joint Spatial Plan team commissioned a multidisciplinary study to investigate whether the West of England has special characteristics of 'place' that engender shared interest and regional affinity, to which emerging planning policies might positively respond. The ultimate aim being to promote happiness, health and wellbeing. This approach to the design, planning and management of space is often described as place-making.

The authors have taken a keen interest in this ongoing study, and as ecologists and geographers wish to ensure that the physical environment is not treated as merely a backdrop to human experience in the emerging place-making strategy but rather is given equal emphasis with cultural influences (Stedman, 2003; Cheng et al, 2003). We therefore aim here to identify the West of England's unique and unifying landscape characteristics, relating to topography, rural scenery, and flora and fauna, which intertwine with human experiences and symbolic meanings to create a sense of place, thereby distinguishing the Region from adjoining areas.

As any design undergraduate will explain, such considerations have a long pedigree and are associated with the genius of place concept, or 'genius loci' as it is often referred to in the classical form. Indeed it was the poet and philosopher Alexander Pope who, in his 1731 Epistle to Richard Boyle, Earl of Burlington, asserted that landscape and setting were key drivers in explaining the genius of place:

Consult the genius of the place in all;
That tells the waters or to rise, or fall;
Or helps th' ambitious hill the heav'ns to scale,
Or scoops in circling theatres the vale;
Calls in the country, catches opening glades,
Joins willing woods, and varies shades from shades,
Now breaks, or now directs, th' intending lines;
Paints as you plant, and, as you work, designs.

Furthermore, we examine whether the inhabitants of the West England show a particularly special environmental consciousness that sets them apart from neighbouring populations, reinforcing attachment to the Region's natural / semi-natural environment. Finally, we consider whether this combination of factors has in turn fostered greater eco-activism and fashioned a unique place for creative thought, endeavour and globally exportable environmental expertise.

#### **Environmental Characteristics**

## **Defining Boundary Features**

Many regions are not clearly demarcated by natural physical features but rather merge in terms of visual character over a wide transition zone in response to gradually changing climate and other more subtle physical geographical forces. Although the boundaries of the West of England were primarily envisioned to encapsulate the four unitary authorities and facilitate strategic planning, by good fortune there is also considerable logic in recognising the Region as a distinct physical geographic entity. This is in large part because the Region, which is roughly triangular in shape, is enclosed by three distinctive natural boundary features that have geo-environmental influence and visceral meaning radiating well beyond their footprints.

The West of England is bound by limestone ranges to the south and east; these being the Mendip Hills (Plate 1) and the southern spur of Cotswold Scarp (Plate 2) respectively, both of which consist of wide plateau-tops, in places over 300m in height, dissected by steep combes. The Mendips form a particularly striking frontier, rising abruptly from the low-lying patchwork expanse of the Somerset Levels to the south. Both hill ranges are designated Areas of Outstanding Natural Beauty (AONB), meaning that they are amongst the nation's most distinctive and naturally beautiful landscapes, and both incorporate multiple sites designated for their ecological importance.

By contrast the Severn Estuary, which borders to the west and separates the Region from Wales, is a coastal / estuarine environment; a vast 'waterland' undergoing constant metamorphosis driven by the ebb and flow of the tide (Plates 3 and 4). The Severn Estuary is of international ecological importance, being designated as a Ramsar Site¹ and Special Protection Area² (SPA) on account of its wetland habitats and associated waterfowl populations. The estuary is one of the largest in Britain and has the second highest tidal range in the world. While definitions of the Severn Estuary's limits differ, on the English side they are generally considered to extend from the village of Aust (the site of the old Severn Bridge) to Sand Point (near Weston-super-Mare), which conveniently mark the approximate northern and southern extremities of the Region's western boundary. In other words, the banks of the Severn Estuary are on its English side, more or less exclusive to the West of England, which is another example of extraordinary serendipity. Upstream conditions along the Severn become increasingly riverine, while to the south the Estuary empties into the open sea of the Bristol Channel.

These three significant boundary features not only combine to provide the West of England with physical enclosure but perhaps also instil in the population a self-awareness and sense of sanctuary, emotions that are probably much less evident in more featureless regions that morph imperceptibly into one another. There are here perhaps some parallels to be made with the separateness and associated pride experienced by the Cornish in the south-western extremity of England, whose county is also clearly physically distinguishable, being bounded by sea on three sides and the River Tamar on the fourth (Marsden, 2015).

## Arrival Experience: 'Gateways' to the West of England

Residents and visitors entering the West of England via its principal arterial road links feel a genuine 'sense of arrival' as they breach its striking and picturesque frontiers. Accessing the Region from the North, the M5 motorway is increasingly squeezed by the Cotswolds Scarp and Severn Ridges, before the Cotswolds snake away to the east to reveal the relatively low-lying expanse of the Frome Valley /

<sup>&</sup>lt;sup>1</sup> Wetland of international ecological importance designated under the international Convention on Wetlands, also known as the Ramsar Convention

<sup>&</sup>lt;sup>2</sup> Site of European importance for birds, designated under the European Union's Directive on the Conservation of Wild Birds



Plate 1. Crook Peak (Mendip Hills) and Loxton Pass (southern gateway to the West of England); Lox Yeo Valley in foreground (photograph by Lincoln Garland)



Plate 2. Cotswold Hills Area of Outstanding Natural Beauty near Bath; Kelston Park in background (photograph by Matt Prosser)



Plate 3. Sand Bay in the foreground; Weston-super-Mare's Birnbeck Pier in the mid-ground and the island of Flat Holm in the background (photograph by Chris Hale)

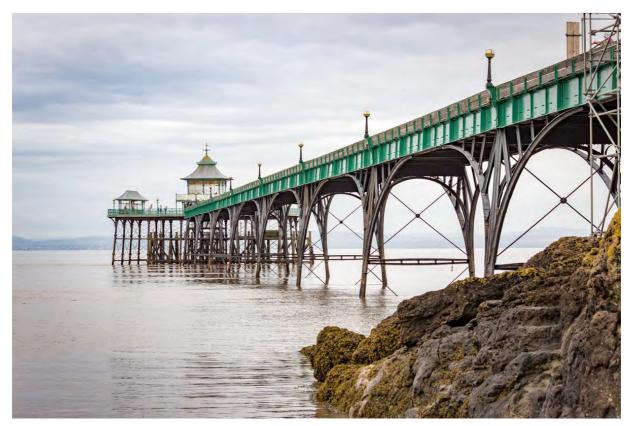


Plate 4. Severn Estuary and Clevedon Pier (photograph by Matt Prosser)

Vale of Berkeley. Entering from the north-east, the Frome Valley is also abruptly revealed where the M4 motorway traverses the Cotswold scarp at Tormarton. From the South, the M5 enters the West of England via Loxton Pass, a narrow gap in the Mendip Hills between the precipitous Crook Peak (perhaps the Mendips' most distinctive hilltop) and Bleadon Hill (Plate 1). Beyond Loxton Pass is the Vale of Winscombe, considered one of the prettiest valleys in the Mendips (Toulson, 1983; Garland, 2016) (Plate 5). The most dramatic of all the arrival experiences, however, is from the west, via the Severn Bridge and the Second Severn Crossing, which link the Region to Wales.

It should be emphasised that arrival experience is a particularly key consideration in place-making, as the special emotions experienced during the first moments of returning can influence, either negatively or positively, the level of anticipation, expectation and ultimately the enjoyment of homecoming. Being involved ecotourism we would suggest that those working in the tourism industry should be much more aware of these emotions, understanding that visitors who have a positive arrival experience have a more enjoyable time, stay longer, spend more, and are more likely to return.

On arrival in the west, the sense of 'apartness' and otherness, vis a vis the far larger hub of civilisation that is Greater London, appears reinforced by a landscape that also 'looks' west (the Cotswolds and Mendips create a west-facing bowl) and hence away from the metropolis that otherwise dominates southern England.

## A Land of Limestone and Levels

The distinctive contrast between the landscape of the West of England and neighbouring areas reinforces sense of place. While there is some overlap in topography and rural character, the alternating ridges and broad clay vales prevailing across the Region's heart contrast with the landscapes of the neighbouring Marlborough Downs (rolling chalk hills) to the east; the Somerset Levels to the south; the open low-lying Severn and Avon Vales to the north; and the Severn Estuary to the west (Natural England, 2014).

The West of England's carboniferous limestone ridges form the Region's skeletal frame. Considering this anatomical metaphor, recall that this mineral in turn consists of the skeletal fragments of countless millions of marine organisms such as corals and molluscs. Preeminent among these protective ribs are the Mendip and Cotswold chains, although various other prominent ridgelines traverse the Region's heart, including the Worlebury Hill; Broadfield Down; Dundry Ridge; Tickenham Ridge - Failand Hills; Walton Down – Portishead Down; and the Bristol Downs (Clifton and Durdham). All of these ridgelines provide splendid panoramic views across the Region and lend a sense of enclosure at a more local level to the denizens of the intervening valleys.

The steep slopes of these hills have inhibited urban encroachment and intensive agricultural practices with the consequence that they incorporate most of the West of England biodiversity hotspots, primarily flower-rich calcareous grasslands and Ancient Woodlands (defined in Britain as having existed continuously since 1600 or before). The calcareous grasslands are a product of the shallow nutrient-deficient and lime-rich soils; such conditions prevent domination of the sward by a small number of large aggressive plant species and thereby allow a rich variety of herbs and fine grasses to flourish. Notable calcareous grasslands include the Uphill Cliff component of Mendip Limestone Grasslands Special Area of Conservation<sup>3</sup> (SAC), Dolebury Warren Site of Special Scientific Interest (SSSI) (also in the Mendips); various locations on the Cotswold Scarp; the Avon Gorge SAC near the heart of Bristol; and Walton Common SSSI overlooking the Gordano Valley. The conservation charity Buglife and the Avon Wildlife Trust (Buglife & Avon Wildlife Trust, undated) have teamed-up to implement a landscape-scale conservation project aimed at creating a network of 'B-Lines' linking these and other wildflower-rich areas across the West of England, providing corridors for bees, butterflies and other insect pollinators.

<sup>&</sup>lt;sup>3</sup> Site of European ecological importance designated under the European Union's Habitats Directive



Plate 5. Vale of Winscombe in the Mendip Hills; Wavering Down and Crook Peak in background (photograph by Lincoln Garland)



Plate 6. Spectacular display of Wild Garlic in King's Wood (Vale of Winscombe) in the Mendip Hills (photograph by Lincoln Garland)



Plate 7. Spectacular display of Bluebells in Prior Wood overlooking the northern extremity of the Gordano Valley (photograph by Matt Prosser)

Ancient Woodlands, mostly dominated by English Oak *Quercus robur* and Ash *Fraxinus excelsior* with Hazel *Corylus avellana* and Field Maple *Acer campestre* understorey, can be found clinging to the northern Mendip edge, the Cotswold Scarp, Avon Gorge (Leigh Woods), Tickenham Ridge, and the western margins of Broadfield Down (King's Wood – Brockley Wood). The undisturbed soils of these woodlands nearly all produce spectacular and much venerated displays of Wild Garlic *Allium ursinum* and Bluebells *Hyacinthoides non-scripta* each spring (Plates 6 and 7).

Rare Greater Horseshoe *Rhinolophus ferrumequinum* and Lesser Horseshoe *Rhinolophus hipposideros* bats particularly favour the combination of extensively grazed grasslands and Ancient Woodland in which to forage, and also make use of the dense network of limestone caves and mines for roosting which are scattered across the Mendips, Cotswolds and elsewhere. SACs have been designated in both the Mendips and the Cotswolds to protect these bats.

The Region's skeletal ridges protect a softer underbelly consisting of expansive clay vales, perhaps most notable of which are the Yeo and Chew Valleys adjoining the northern Mendip edge, which include the recreationally popular Blagdon (Plate 8) and Chew Valley lakes respectively. Both lakes are designated as SSSIs primarily on account of their wintering waterfowl populations, while Chew Valley Lake has the added protection of SPA status. These two valleys are amongst the most scenic in the West of England and consequently are included (in part) within the Mendip Hills AONB. It is not surprising that food and drink manufacturers with headquarters in the Yeo Valley (and adjoining Vale of Wrington), including Thatchers, Yeo Valley Farms and Butcombe Brewery, all celebrate the natural beauty of these valleys when marketing their products and 'back to nature' earthy reputations.

The Frome Valley / Vale of Berkeley, which covers much of the northern half of the West of England, is generally a more low-lying landscape with shallow winding valleys bounded by the Cotswolds scarp to the east and the Severn Ridges to the west. While this area is generally sparsely wooded, it does include the Region's woodland 'jewel in the crown' - Lower Woods SSSI near Wickwar. Lower Woods, at 300ha in size, is the largest Ancient Woodland in the Region and the only one to our knowledge that still supports breeding Nightingales Luscinia megarhynchos.

Juxtaposed with the West of England's dominant alternating ridge and vale terrain are the flatlands of the North Somerset Levels, Gordano Valley and Severnside Levels, which prevail across the south-western and north-western sides of the Region. These former swamps and marshes are now open, relatively treeless landscapes, consisting mostly of wet pasture divided and drained by a vast network of rhynes. While the predominant chequer-board ditch-lined field pattern unmistakably signifies man's taming of this low-lying wetland landscape, irregularly shaped fields are still present on the Severnside Levels, reflecting retention of more natural creek alignments. Even though the levels are mostly intensively farmed, pockets of biological richness remain, most notably the Gordano Valley and Puxton Moor SSSIs, which include mosaics of richly vegetated wet-meadow, reedbed, carr and rhyne habitat.

In terms of agricultural practices the Region is also distinctive as it sits in the zone of transition between arable production, which predominates on the eastern side of Britain, and pastoral farming prevalent to the west; the transition reflecting the generally wetter conditions, steeper relief and poorer soils on the western side of the country. As should be evident from the descriptions and images included here, the countryside of the West of England (and indeed Britain as a whole) includes no meaningful areas that approach *bona fide* wilderness. The rural landscapes and associated flora and fauna that the British cherish most are the product of 100s if not 1000s of years of cultural influence rather than untamed natural processes; moreover the most traditionally and extensively managed farmland and forest has the greatest ecological diversity and perceived aesthetic merit<sup>4</sup>.

<sup>&</sup>lt;sup>4</sup> Note though that there is a growing 'rewilding' movement in the UK, as is the case in many other countries, which aims to restore wild nature in the landscape.



Plate 8. Sheep grazing on the high Mendip plateau, overlooking Blagdon Lake and the Yeo Valley (photograph by Lincoln Garland)



Plate 10. Prior Park on the edge of Bath (photograph by Matt Prosser)



Plate 9. World Heritage City of Bath, set within the southern spur of the Cotswolds Hills (photograph by Matt Prosser)

## **Rural Setting of the Bath World Heritage Site**

Special emphasis is given here to Bath's UNESCO World Heritage Site status. Although the designation is based on cultural criteria, the picturesque extensively farmed rural setting, founded around a complex system of plateau-tops and incised combes, aptly referred to by Evans (2000) as the Broken Cotswolds, is considered 'inextricably linked' to the protective conservation status of this unique Georgian city (B&NES, 2009) (Plate 9). The encircling hill-top plateaus consist of the honey-coloured Greater Oolitic Limestone, the much celebrated building material so evident in local farmsteads, villages and indeed much of Bath itself. This locally occurring building material has been used from time immemorial, 'making man-made structures appear to be part of the land itself' (Cotswolds Conservation Board, 2006).

This eye-catching and complex landscape has been created by the erosional forces of the River Avon and its tributaries, which have cut the many valleys, and also the numerous steep sided tributary valleys that further contribute to the intricacy. The juxtaposition of plateau-tops (or downs as they are locally known) and combes has in turn led to opposing landuse patterns. The former are relatively treeless open landscapes composed of large fields (with much arable) enclosed by drystone walls, while the latter are characterised by irregular shaped woodlands and small pastures bounded by species-rich hedgerows; a similar pattern is evident in the Mendip Hills. To the south of Bath the Cotswolds eventually merge into the eastern extremity of the Mendips in an area referred to as the 'confused undulations'.

## West of England's Historic Parklands

Woodland (including wood pasture) and flower-rich grasslands are commonly found within the many historic country parks of the West of England, the locations of which were generally chosen to take advantage of varied topography and striking hillside vistas (Evans, 2000). These popular parkland landscapes, including Ashton Court, Tyntesfield, Blaise Castle, Dyrham Park, Dodington House, Kelston Park and Prior Park, are particularly prevalent in the Region, which is thought to be in part a legacy of Bristol's historic maritime-generated wealth (Avon Gardens Trust, undated; Natural England, 2014) (Plate 10). The latter three parks were designed, or at least modified by, Capability Brown, an eighteenth century landscape architect renowned in Britain for his more naturalistic 'gardenless' compositions.

#### **The Avon Catchment**

The strong influence of the Avon Valley is particularly influential on the Region's landscape character, given that the catchment covers a large portion of Bristol, B&NES and South Gloucestershire, and also the north-eastern corner of North Somerset (Plate 11). The River Avon, on which Bristol and Bath were founded, meanders its way for 75 miles from its source in South Gloucestershire, through BANES and Bristol (and also the north-western corner of Wiltshire) to its confluence with the Severn Estuary at the port of Avonmouth. The river flows through a varying topography ranging from Limpley Stoke Valley, the dramatic steep-sided (but broad) vale immediately upstream of Bath, to wide flood-plain between Bristol and Bath. Towards the end of its journey the river cuts through the spectacular Avon Gorge, which extends for over 2km and is over 90 metres deep in places (Plate 12). The Gorge, along with Brunel's Clifton Suspension Bridge that spans the ravine, have become the iconic images of Bristol, and indeed the entire West of England.



Plate 11. River Avon between Bristol and Bath; Kelston Round Hill in distance (photograph by Matt Prosser)



Plate 12. Avon Gorge with Clifton Suspension Bridge and Bristol Balloon Festival in background (photograph by Matt Prosser)

## Initiatives at the Regional Scale: Landscape Linked to Development

The landscape-scale / ecosystem-based approach to the management of natural resources is gaining increasing support, reflecting the fact that natural processes and wildlife do not respect political boundaries (Clarke & Jupiter, 2010). This holistic approach places particular emphasis on the linkages between land and sea; the implications of human activities; conservation of ecosystems and their functions; and integration of ecological, socio-economic and governance perspectives. The concept of place-making has become all the more relevant as this landscape-scale approach to conservation has developed in popularity (Cheng *et al.* 2003; Potschin & Haines-Young, 2013). Establishing coherent and robust green infrastructure on a landscape-scale not only creates a permeable landscape for wildlife and strengthens ecological integrity between important wildlife sites (Lawton, 2010), it also provides a greater range of more effective and robust ecosystem services, which helps establish links between communities and their environment, contributes to human wellbeing, and in turn invigorates people's affection for landscape and associated wildlife.

Given these considerations, the various landscape-scale strategies being implemented in the West of England are to be welcomed, key amongst which is the *Joint Ecosystem Service Evidence Project*. This project is seeking to identify and map the benefits which people in the Region derive from nature (ecosystem services) so that these can be protected in emerging development and growth strategies (Environment Systems, 2015).

The Severn Estuary and adjoining levels have formed the basis for the creation of the Severnside Wetlands Nature Improvement Area (NIA) (West of England Nature Partnership, undated). The NIA project was instigated by the UK Government's Department for Environment, Food & Rural Affairs (Defra) in 2012 with the aim of creating joined-up and resilient ecological networks at a landscape-scale. The Severnside Wetlands includes multiple wetland habitats and species of conservation importance, many of which are threatened by intensive industrial development around Avonmouth; the rapid expansion of the major coastal towns (Portishead, Weston-super-Mare and Clevedon); and intensive agriculture. Given these pressures the Severnside NIA aims to balance demands on the landscape so that the Severnside Wetlands become a 'vibrant, nature-rich landscape, where people, business and wildlife thrive'. The West of England Nature Partnership is developing proposals for a Coastal Path extending the length of the NIA, connecting with the South-West Coastal Path at Brean and the Wales Coast Path at the Severn Bridge. This should bolster this sub-region's identity, and supplement the wider Region's existing network of long-distance hiking trails, which already includes the Cotswold Way and Mendip Way, and also the Limestone Link that connects the two.

Other key landscape-scale strategies include the B-Lines project discussed above and various city-scale projects in Bristol. Key among the urban strategies is Bristol's *My Wild City* project, which has the ambitious aim to 'transform gardens and open spaces into a city-wide nature reserve' (Avon Wildlife Trust, undated) (Plate 13). The emphasis of My Wild City on bringing wildlife to people's doorsteps, only a small proportion of which will be scarce or endangered, may do more to promote interest in nature than many other schemes focussing on scarcer species that inhabit more remote rural locations, unconnected to most people's day to day experiences.

Returning to the River Avon, various organisations are busy implementing site-specific projects to improve the catchment in terms of wildlife value and flood resistance. The Bristol Avon Catchment Plan in particular encourages a whole-system, integrated approach to water and land management, rather than relying on 'end of pipe' engineered solutions (Bristol Avon Catchment Partnership, 2016).



Plate 13. Avon Wildlife Trust's My Wild City project aims to transform Bristol's gardens and open spaces into a city-wide nature reserve (photograph by Sam Hobson and Avon Wildlife Trust); Foxes Vulpes vulpes are found in most parts of Bristol right down to the city centre

## The West of England's Special 'Environmental Psyche'

Another factor shaping the West of England's genius loci are the people, and it would appear that there is a particularly strong link between the Region's environment as described, the type of person choosing to live in it, and their areas of interest and endeavour. Various research suggests that certain personality traits are good predictors of an individual's level of concern about the environment (Milfont & Sibley, 2012). Specifically the trait 'Openness' (to experience and ideas) is correlated with high levels of environmental engagement. Perhaps this is because environmental dilemmas are open to much interpretation and result in unpredictable changes. Further research suggests that there are spatial variations in personality traits, with some characteristics more common in certain regions than in others (Rentfrow, 2010; Rentfrow et al. 2015). Rentfrow et al. undertook a substantial UK-wide study of regional variations in personality and found the trait 'Openness' to be disproportionately concentrated in Bristolians, along with residents in certain other metropolitan areas, most notably Oxford, Cambridge, Brighton, Manchester and London. Rentfrow et al. suggest that Openness is also associated with the sub-traits of creativity, individualism, and curiosity; complementing the environmental awareness described above.

The inhabitants of the West of England do indeed appear to display a strong passion for whole variety of environmental issues, a characteristic that is perhaps linked to a unique environmental psyche associated with their predisposition for Openness. Bristol, which sits at the centre of the West of England and is often referred to as the UK's 'Green Capital', is perhaps the 'beating heart' of the Region's distinctive eco-consciousness (Sawday, 2012; Douglas, 2016). Bristol includes numerous inner-suburb pockets of bohemian leftfield green awareness, including Montpelier, St Werburghs, Easton, Totterdown, Southville, and St Andrews, and the City has a long history of community environmental action, with residents being energetically involved in protecting and conserving their local wildlife sites. The Forum for the Future's Sustainable Cities Index, which tracked progress on sustainability in Britain's 20 largest cities between 2007 and 2010, placed Bristol in the top four each year and in first position in 2008. Bristol was also the first UK city to be awarded European Green Capital status in 2015 (Plate 14) and is home to various celebrations of biodiversity and sustainable living, including the annual Festival of Nature, Wildscreen Festival and Big Green Week (Plate 15).

Rentfrow et al. (2015) suggests that regional personality differences can establish as a consequence of individuals (and businesses) with certain personality characteristics, selectively migrating to locations with similarly minded people (as well as particular features, including healthy environments), which satisfy their needs for stimulation and enrichment. The West of England, and Bristol in particular, appears to be a magnet for attracting environmentally aware individuals and sustainable / green technologies and organisations (Sawday, 2012; Douglas, 2016). Many high-tech and media businesses are attracted to Bristol by its growing young and well-educated population (and vice versa) that appears to be disproportionately environmentally aware in outlook. It would seem no accident that the creative likes of Banksy and Aardman Animations have emerged out of Bristol, both of which have expressed strong environmental messages in their artwork. Sustrans, the Soil Association, City Farms, Forum for the Future, the Schumacher Institute, Avon Wildlife Trust, Natural England's Wildlife Licensing Unit, the Environment Agency and the BBC's Natural History Unit, are all based in Bristol and attract educated environmentally-minded people. With respect to the latter organisation, another of Bristol's eco-titles is the 'world capital of the wildlife and environmental film industry', as it produces 25% of this sector's global output; the BBC's critical mass spurning an agglomeration of associated freelancers including producers, directors and cameramen specialising in natural history film making (Centre for Cities, 2014).

Variance in the spatial distribution of personality traits can have far-ranging political outcomes (Rentfrow *et al.* 2015). Bristol's environmental consciousness has certainly been reflected in the policies of Bristol City Council which has shown real commitment to improving quality of life for its residents by rejuvenating the urban realm; promoting public transport and reducing car dependency;



Plate 14. Former Mayor of Bristol, George Ferguson, with European Commissioner for the Environment, Janez Potočnik; Bristol awarded European Green Capital 2015 (photograph credit – European Union)



Plate 15. Bristol Festival of Nature (photograph by Jon Craig)

advancing a green economy; and protecting and connecting greenspaces. The concept of multifunctionality, which recognises the various social, economic and environmental benefits that biodiverse greenspaces provide, is embedded in the Council's green infrastructure policies (Bristol City Council, 2008). Bristol also elected former mayor, George Fergusson (independent), on a ticket of urban renewal and environmental sustainability, and the City has one of the UK's highest concentrations of Green Party councillors (eleven). Furthermore, in the Bristol West constituency the Green Party came close to gaining its second MP in the 2015 general election, coming second with 26.8% of the vote. With the exception of Brighton, where Caroline Lucas is the Green's only MP, in all other UK constituencies the Green Party finished a considerable way behind the winning candidate.

Although not at the same scale and lacking the same socially activist dynamic as Bristol, Bath is also not without its environmental plaudits and internationally known environmental grandees. Two Bath-based Sterling Prize winning practices, Feilden Clegg Bradley architects and Grant Associates landscape architects are amongst the foremost environmentally-inspired design practitioners in the UK. The latter is responsible for various visionary initiatives that are redefining nature in the city, including the iconic Gardens by the Bay in Singapore, as recently featured on the BBC's Planet Earth series. We suspect, from our regular conversations and collaborations with these parties, that the motivations for such companies choosing to establish in Bath and its hinterland are similar to our own and include - high biophilic (natural and appealing) qualities of place that provides vantage and refuge, forest and field, high diversity and expansive views; cultural heritage with architecture forged out of the enlightenment that resonates with the power of reason and proportion; connectivity to key foci such as London, Birmingham and Cardiff, but without being 'in the metropolis'; and the effect of the above in creating a nucleus of similarly minded people, and the scope for creative and constructive collaboration that comes with that.

The distinctive green consciousness of the Region is also evident in a number of its satellite towns, perhaps most notably Stroud, Frome and Glastonbury. Stroud (and neighbouring Nailsworth) is home to Forest Green Rovers (owned by Dale Vince of Ecotricity fame), the environmentally conscious and vegan football club that has just been promoted to the Football League; while Glastonbury is home to a fairly substantial 'New Age' community and of course the world renowned music festival, both of which are associated with eco-inspired philosophies.

It is also interesting to note that the West of England's eastern boundary very roughly accords with the Roman constructed Fosse Way, which in early Roman times delineated the boundary between the Empire's 'pacified heartland' to the east and a 'militarised zone' to the west (Crane, 2016). Once again the West of England is associated with a rebellious tendency, although this is now reflected through a propensity for peaceful eco-activism. Whatever the reasons are, the Region does appear to have a 'go west' pioneering spirit and lure, attracting people towards a greener and better future.

#### **Conclusions**

While definitions of sense of place have historically focussed on cultural influences, we have made the case here that landscape underpins place-based attachment and belonging. Although the West of England was envisioned primarily for strategic planning purposes, by good fortune it also has real geographical integrity, being bound on all sides by attractive prominent landscape features - the Mendip Hills, Cotswold Hills and Severn Estuary. This Land of Limestone and Levels also contrasts with neighbouring landscapes, reinforcing a sense of identity and belonging among its inhabitants.

Place-making that seeks to draw major inspiration from the natural environment and landscape should also seek to build on any progressive environmental traits within the population, which in the case of the West of England appear particularly prevalent. Strategic progress is already being made in this regard through various landscape-scale conservation projects that aim to strengthen connectivity between people and nature, while also enhancing the integrity of wildlife habitats.

When the contrasting landscape qualities of natural beauty and historic culture, enclosure and expansiveness, refuge and connectivity all combine, the result can be a powerful magnet for people characterised both by environmental activism and ecologically inspired innovation. We contend that the West of England is a special example of this phenomenon. Its unique environmental qualities attract a population with characteristics that in turn further mould an extraordinary and unique place to live. It would seem vital therefore to appreciate these intangible but vital qualities when discussing regional place-making, economy, urban development and conservation of the natural world.

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