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## Landscape Planning – preservation, conservation and sustainable development

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### Abstract

Landscape planning has traditionally been concerned with an agenda of protection, amenity and ornament. This focus has been important, but has remained peripheral to mainstream spatial planning. Building on an influential but partial set of practices, the latter 20<sup>th</sup> century saw landscape planning mature into a domain with coherent purposes and techniques. In the first part of the 21<sup>st</sup> century, landscape planning has identified more strongly with the core concerns of spatial planning. Through innovations such as the European Landscape Convention, landscape has become increasingly central to matters of sustainability and place-making across both urban and rural realms.

# Introduction

The spirit and purpose of town planning in Britain has always had to contend with a curious degree of anti-urbanism (Glass, 1972). Despite the planning system's avowed pursuit of 'the home healthy, the house beautiful, the town pleasant, the city dignified and

the suburb salubrious'<sup>1</sup>, an enduring perception of town planning has been to refuse, restrict and contain. Rather than celebrate, for instance, the widespread construction of decent affordable homes or an enviably reliable energy infrastructure, there has been a persistent tendency to lament their violation of a green and pleasant land. Equally curiously, despite the noble tradition of landscape planning, it has been a Cinderella specialism within town planning, barely on the radar of most practitioners. To many planners, 'landscaping' is a cosmetic exercise - something to do with prettification, stopping trees being felled, and screening eyesores. Belatedly, landscape has gained some sort of elevation through the European Landscape Convention (ELC) (Council of Europe, 2000), but has been denied a Planning Policy Statement, unlike the upstart 'biodiversity'.

As a centenary essay, this paper reflects on the evolution of landscape planning in the UK over about the past century, charting in particular how it has evolved from a specialised 'sector' to an integrative framework for sustainable development and smart growth. Although the focus of the essay is on the evolution of practice within the UK, it draws upon a range of international influences. The compass of landscape planning is not defined in a prescriptive way, both because it continues to evolve, and because there is no consistent agreement over its scope. Historically, 'planning' in the broad sense of purposeful improvement has impinged on the landscape for centuries, though this mainly concerned localised changes to 'land' with little awareness of cumulative effects. Where conscious beautification of land took place, it was normally within the artistic tradition of design rather than planning.

Even in more recent times, theorists and practitioners have not been of great help in confirming the scope of landscape planning, and a 'semantic exploration' of the term in the 1980s was unable to identify either its first use or offer a clear definition (Seddon, 1986). Leading proponents of landscape planning have tended to veer away from definitive statements, preferring to focus on aspects central to their own philosophies and practices. There are persistent themes of working in harmony with nature rather than against it (McHarg, 1969; Hackett, 1977), and of placing landscape issues within a wider

<sup>&</sup>lt;sup>1</sup> John Burns, President of the Local Government Board, in 1910, cited, for example, in Waller (1983).

multi-disciplinary and large-scale planning context (Lovejoy, 1973; Clouston, 1986). Crowe (1967) sought to broaden 'land planning' to include the 'complex organic fabric' of life, both ecosystemic and aesthetic. More recently, Marušič (2002) has suggested that landscape planning is an example of 'civic science', in which the public engage in collective reasoning and creative application of knowledge about inhabiting the environmental in a context of scientific uncertainties. Most writers thus tend to focus, not so much on what landscape planning is, but how they feel it should be done (Steinitz, 2008), often writing from a particular perspective such as landscape ecology (Dramstad et al, 1996; Leitao Botequilha and Ahern, 2002; Steiner, 2008), land suitability analysis and environmental capacity (Steinitz and Werthmann, 2007), forestry (Fries et al, 1998), or network analysis (Linehan and Gross, 1998). Broadly, landscape planning appears to be distinguished from design by its larger scale, focus on public rather than private domains, and multiplicity of clients and contracts.

At the start of the 21<sup>st</sup> century, the European Landscape Convention asserted that landscape planning involves 'strong forward looking action to enhance, restore or create landscape' (Table 1). This definition, though broadly supported in this paper, is not without controversy. Much of what UK practitioners presumed to be landscape planning actually turned out, in the eyes of the ELC, to be 'landscape protection' (actions to conserve and maintain the significant or characteristic features of a landscape justified by its heritage value) or even 'landscape management' (regular upkeep in a context of guided change). Whilst affirming the importance of 'landscape protection' this paper is sympathetic towards the ELC definition of landscape planning, particularly in terms of a growing emphasis on creativity and regeneration.

Thus a central problem in chronicling landscape planning is that it comprises a loose amalgam of concerns, ranging from national parks at one end to street trees at the other. Increasingly, it has become associated with assessments of character and visual impact, but this has given it a toolkit and not necessarily an intellectual core. This review seeks to track the evolution of landscape planning, showing how it has developed from a sectoral practice centred on protecting natural beauty and amenity, to an integrative framework

for creating sustainable places, possessing both technical sophistication and conceptual coherence.

## Prettiness and Preservation

Although the essay focuses on the past century, it is necessary briefly to delve back a little further in order to appreciate the origins of modern landscape planning. Principally, these are associated with the idea that the natural environment could possess beauty. Although this seems a banal observation, it is by no means self-evident. Nature was cruel, countryside was humdrum, parish pump gossip was intolerant, and terrain was often hazardous. The human eye might discern beauty in nature only after it had been suitably tamed, ordered and rendered polite by a wealthy landowner and his designer. If an observer saw any attraction in the untamed countryside, it was likely to be through experience of the 'sublime' – the philosophical counterpoint of beauty – and its sensations of human inconsequence and wonderment.

It was only from around the mid-18<sup>th</sup> century, and gaining momentum in the 19<sup>th</sup>, that philosophers, writers and artists in Britain widely began to claim that nature could possess beauty in the same way as artefacts or bodies. Admittedly, it is possible to point to the representation of framed 'landscapes' as objects of beauty in previous cultures – Roman and Japanese for example – but this discussion starts from the comparatively recent recognition of and desire to protect 'natural' beauty. A parallel trend, gaining momentum during the late 19<sup>th</sup> century, was that parks and green spaces might be considered suitable amenities for the urban masses. Initially, responses to 'improve' the natural scene were either for efficient agriculture or the delight of the landed gentry. The processes of land improvement and estate design are not addressed in this paper, as they refer to separate albeit parallel practices of resource production and artistry. Rather, the emphasis here is on the landscape of public realm and open countryside which now fall within the purview of 'spatial planning'.

The British landscape preservation tradition emerged in parallel with complementary international movements. Most notably, in the USA, national parks were being federally acquired from the latter part of the 19<sup>th</sup> century, founded on a concept of wilderness. There, aesthetics reflected the sublime transcendental and spiritual qualities of pristine lands. The movement was deeply influenced by an émigré Scot, John Muir, who articulated the humble voice of stewardship as a counterpoint to the brash rhetoric of pioneering conquest. Muir saw Yosemite as a region to 'reserve out of the public domain for the use and recreation of the people' so that its 'fineness and wildness' [was not] devastated by lumbermen and sheepmen' (Muir, 1890). A different emphasis has predominated in most of the European countryside (especially south of the subarctic), where there is a more evident palimpsest of time-depth and cultural settlement.

In the British tradition, the kinds of landscape regarded as beautiful have been influenced by the polite tastes of an elite. As noted elsewhere (Selman and Swanwick, 2010), the debate regarding beauty and the sublime is associated with the philosophies of Shaftesbury and Burke in the early 18<sup>th</sup> century, whilst the naming and framing of beauty spots was advanced by Romantic poets such as Wordsworth and artists like Turner. This period had a profound effect on society's acceptance of the importance of landscape, its representation as a visual composition, and the possibility that it might be preserved against urban encroachment. It is not surprising that the Victorian period saw a burgeoning of interest in preserving the countryside, not only on the grounds of national heritage and wholesome qualities, but also because of Pre-Raphaelite and other antiindustrial sentiments. Amongst other things, Morris's and Ruskin's representation of natural beauty as the antithesis of town and factory strongly nurtured the emergence of a voluntary preservation movement, notably the establishment of the National Trust for Places of Historic Interest or Natural Beauty in 1884.

The influential thinkers (and doers) behind landscape planning in the early 20<sup>th</sup> century extended this tradition. Selman and Swanwick (2010) have noted in particular how the appreciation and protection of rural landscapes were advanced by a small number of key protagonists, all enthusiastic for open and relatively wild countryside and concerned

about its erosion by urban growth. Included in this number was Patrick Abercrombie, who paved the way for landscape planning as it came to be understood, by introducing the systematic landscape survey within the context of a sub-regional plan (Deheane, 2005). These individuals, through various committee memberships and lobbying activities, exerted a significant influence over the tenor and content of the watershed legislation, the National Parks and Access to the Countryside Act 1949.

The history of this Act and its subsequent implementation have been widely documented (e.g. Cherry, 1975; Mair and Delafons, 2001; Woolmore, 2009). It is clear that this movement deserves greatly to be celebrated. Yet, as a platform for landscape planning, it was a partial affair. It reflected a particular aesthetic tradition, was influenced by writerly and artistic conventions, and was applied to areas agreed by a relatively like-minded community of campaigners. It also affirmed the notion of landscape as something which could be framed and separated from its less worthy surroundings. True, the national parks were also associated with more democratic arguments, such as the desire following both World Wars to cherish a hard-won heritage and the demand from factory workers to have a 'right to roam'. Yet, the arguments supporting landscape beauty remained essentially protectionist. The 1949 National Parks and Access to the Countryside Act was in many respects a fine piece of legislation, forged in the same post-war socialist furnace as town planning, social welfare and free healthcare, and yet it bore flaws from the outset. Most signally, whilst creating a powerful scientific nature conservation body, it offered a compromise system for national parks system in England and Wales (and surrendered to the power of Scottish landowners), and a rather token set of land access provisions.

The Act, reflecting the collective wisdom of the time, assumed that landscape was synonymous with scenery, farming was a protector rather than industrialiser of the countryside, and a system of enhanced planning controls would suffice as a safeguard. Only in the two frontrunner national parks – the Peak District and Lake District – was an effective planning authority created, and the remaining eight had to rely, for the next four decades, on their constituent local authorities for expertise. Yet for all the limitations of the system, the national parks of England and Wales achieved enduring successes and

have evolved over the decades to be beacons within IUCN's Category V of Protected Landscapes (Phillips, 2002).

Indeed, it would be wrong to label the early landscape movement as narrowly preservationist: William Morris's understanding of beauty 'being in accord with Nature' (cited in Taylor, 1997) has resonances with contemporary theories of ecological aesthetics; Morris and Ruskin were informed advocates of Howard's 'garden city' movement; whilst the 'rural' reports of the 1940s showed visionary insight into interdependencies between environment, society and economy (Dower, 1945; Minister of Works and Planning, 1942). Nonetheless, this period was subliminal in three respects in embedding a landscape planning mindset. First, landscape was essentially rural, as well as being visual and pretty. Second, development was a threat, to be repulsed by an additional layer of planning bureaucracy. Third, the dominant landscape planning technique became that of 'designation' – drawing a line on a map to create refuges that could be safeguarded from the tentacles of the urban 'octopus' (Williams-Ellis, 1929). In areas thus designated, the body could be exercised and the soul inspired in a process of physical and spiritual 're-creation'.

Although real 'landscape' was not to be found in towns, the 1947 Town and Country Planning Act greatly strengthened the enlightened urbanist tradition of providing pleasant amenities close to where people lived. The profession of landscape architecture – whose maturing credentials were reflected in the establishment of the International Federation of Landscape Architects in 1948 – reinforced society's capacity to make cities more liveable. This facet of landscape planning was similarly related to wholesome air and pleasant views, which combined to create the elusive commodity of amenity. Enlightened developers and municipalities preserved and created amenities such as open spaces and urban parks, and were strongly influenced by the garden cities movement of Howard and his contemporaries, where decent housing was to be complemented by generous gardens and encapsulated greenspace. More ambitious and ecologically-informed approaches were also pioneered in the late 19<sup>th</sup> century, especially in Olmsted's 'emerald necklace' of parks and wetlands within Boston (Zaitzevsky, 1982).

The early practice of landscape planning thus emerged from two sources: a rural tradition which became bureaucratically codified into the selective designation of acclaimed areas of countryside; and an urban tradition of providing and safeguarding civic and neighbourhood amenity. In both cases, it was assumed that educated human intervention could reverse the ravages of development and even improve upon nature, hence the conferment of legal powers for the 'enhancement' of the countryside (e.g. The Countryside Act, 1968).

It is important to understand the origins of landscape planning, as these have profoundly influenced our mindsets to the present day. In particular, they have enshrined landscape as a 'sector', created one landscape planning tradition in the countryside based on protective designation and another in urban areas based on site design and maintenance, ring-fenced particular areas and sites as being worthy of attention and sidelined others as insufficiently meritorious, and emphasized the visual aesthetic as the primary basis for planned intervention. We have much to be grateful for from this early legacy. It was necessary to prevent wholesale loss and to nurture a range of good practices; yet it was not sufficient, either as an understanding of the phenomenon of landscape, nor as a vehicle for sustainable development. Not surprisingly, landscape planning has progressively been reinvented (or rediscovered) as a positive practice, integral to the wider project of spatial planning.

# Safeguard and Science

From the 1960s, the concerns of landscape planners started to become more extensive, for which a number of reasons can be suggested. First, there was the emergence of the modern environmental movement, which many would say began with Rachel Carson's Silent Spring (Carson, 1962) and reached a crescendo in the 1972 Stockholm Conference (Ward and Dubois, 1972). Town planning could reasonably claim to be one of the pioneer environmental professions, yet in the light of the new ecological agenda it

seemed flat footed. 'Sixties' planners were identified with a technocentrist agenda of demolishing the old and engineering the new. Yet the seeds of a more ecocentric approach, which would re-position planning as a key player in environmental policy, were being sown. Notably, in the USA, growing pressures from 'green' lobbyists led to the drafting of legislation for environmental impact assessment (EIA) resulting in the National Environmental Protection Act, 1970. In the ensuing decades, the widespread adoption of EIA was to mainstream environmental considerations into planning, and the Environmental Assessment Regulations of 1988 introduced the first reference to 'landscape' in UK legislation. The rise of ecocentric thinking in planning was epitomised in Ian McHarg's Design With Nature (McHarg, 1969), which framed urban expansion in relation, not to short-term socio-economic benefit, but to the long-term capacity of landscape to accommodate change.

Second, applied ecology was maturing as a science, and there was a growing understanding of the need to shift from 'preservation' to 'conservation' (Usher, 1973). Especially in highly modified regions, wildlife preserves and landscapes could not simply be left to look after themselves. The result of mere ring-fencing would be the gradual deterioration of sites which were too small and prone to external disturbance, and too reliant on traditional land use practices, to sustain system integrity without active management. This new wisdom began to suffuse thinking about landscape planning as well as biological conservation.

Third, there emerged an increasingly scientific approach to codifying landscape, strongly influenced by the quantitative revolution of the 1960s and 1970s as mainframe computers began to transform academic and work practices. This represented a marked shift from the origins of landscape appreciation in the arts and humanities. As previously noted the foundations had been laid in Abercrombie's systematic approach to landscape survey developed in the 1930s, whereby he enrolled geological and other scientific knowledge in the fraught task of demonstrating "that some scenery is more precious than other" (Abercrombie 1933, cited in Deheane, 2005). Scientific explanations for landscape preference were pursued by scholars such as Appleton (1975), and these were

complemented by physical geographers such as Linton (1968), who attempted to score landscape in terms of measurable attributes. The increasing capacity for multivariate statistical analysis on the more powerful computers of the day led to further developments to predict relative landscape values from pre-determined parameters (Dearden and Rosenblood, 1980). Whilst purely numerical approaches to landscape evaluation now seem crude, they left an important legacy: they mainstreamed landscape into plan-making by providing outputs that could be integrated with other planning surveys; they established that all landscapes had some importance, by producing descriptions and values for the entire territory, not just designated areas; and they affirmed the need for consistent and rigorous approaches to description and evaluation.

Techniques and theories continued to evolve during the 1980s and 1990s, facilitated by a new generation of computers with powerful text and image processing capabilities, and a growing emphasis in the academy on qualitative research. Similarly, the potential to engage stakeholders in deliberative processes has greatly benefited from the power of modern computers to enable us to view entire landscapes from satellite imagery (Antrop and van Eetvende, 2000), including the capacity to depict realistic future landscape scenarios (Bishop and Lange, 2005; Lange, 1994; Schmid, 2001; Miller et al, 2008) and potential visual impacts of development proposals (LI/IEMA, 2002). Economists, too, have strongly influenced environmental decision-making, by producing ways of valuing nonmarket goods and services. Although controversial, these have indisputably mainstreamed landscape considerations in to core planning and policy processes (Campbell, 2007).

By the turn of the 21<sup>st</sup> century, evolving methods of mapping and evaluation had matured into territorially comprehensive assessments of landscape character (Swanwick, 2004). The task of landscape planning was being promulgated as that of promoting distinctiveness, based on a systematic understanding of the layers of physical features and cultural practices that had, over time, combined to make places different and special. Whilst landscapes were still seen to be fundamentally produced by their physical environment and material traces of human occupation, they were also typified by sensory

qualities such as remoteness and tranquillity. Important in its own right as a methodological development, landscape characterisation resonated deeply with core planning concerns about the loss of local and regional distinctiveness in a period where globalising forces were causing everywhere to become more similar.

A fourth influence was the growing importance of 'multiple use' theories in rural and natural resource planning, and especially the acknowledgement that there was a wider public interest in the experience of landscape than simply the needs of the primary productive enterprise. A signal example was the work by the Forestry Commission and their landscape adviser (Dame Sylvia Crowe) in designing commercial forests so that they complemented rather than blanketed the landscape. Although essentially an exercise in 'design', it was over such a large spatial and temporal scale, and engaged so systematically with the complexity of land systems and their economic use, that it constituted 'planning'. This tradition was further infused with ecological thinking, and the links between aesthetics and biodiversity, by one of the Forestry Commission's subsequent chief landscape architects, Simon Bell (2004). CAD/GIS packages now permit more sophisticated methods of draping alternative land covers over digital terrain models, enabling realistic representation of alternative species mixes and clear/partial fells, and their changing appearance over time (Auclair et al, 2001). In the UK, 'forest design plans' enshrine a range of good practices, and similar approaches internationally reflect the need for exemplary approaches to the landscape scale effects of forestry.

Multiple use of landscape was also driven by the rapid growth of outdoor leisure. A 'fourth wave' (Dower, 1965) of land transformation (the first three being industrialisation, railways and car-based suburbs), raised awareness that landscape planning in a relatively small country needed to address the whole countryside, as well as areas of especial demand such as protected landscapes and state forests (Patmore, 1970). Hence, in the late 1960s, new legislation (Countryside [Scotland] Act 1967, Countryside Act 1968) replaced the National Parks Commission with a Countryside Commission and created a Countryside Commission for Scotland. This had a major effect in signalling landscape planning as something pertinent to the entire countryside and not just elite

areas. As well as revitalising the designation process (leading to additional Areas of Outstanding Natural Beauty in England and Wales, and National Scenic Areas in Scotland), it created the new facility of 'country park' and introduced research and experimental powers which inter alia drew attention to the needs and qualities of ordinary landscapes such as the urban fringe. Green (1996) systematically depicted how the leisure and conservation phenomenon resulted in amenity becoming a major land use in its own right, and not merely a bystander on land left over after farming, forestry, water catchment and military training. The recognition that much of our land yielded far more benefit in environmental services than it did in food and fibre was leading to a transformation of rural policy and professional expertise.

Fifth, an area of 'landscape science' evolved in response principally to the need for widespread land reclamation in the wake of de-industrialisation. As society started to demand reductions in pollution and waste, there was a growing need to find ways of recycling land which had been damaged and contaminated by mining and processing industries. On the one hand, many ambitious reclamation schemes failed for want of knowledge about soil remediation and vegetation establishment on chemically inhospitable sites; on the other hand, nature had sometimes spontaneously healed the damage by forming a vegetation cover that might host rarities, taking advantage, for example, of unusually alkaline or damp conditions. Often, conventional civil engineering approaches were necessary, especially where ground instability or dangerous toxicity posed problems to after-use. These needed to be supplemented, however, by adapting knowledge gained in conservation science, and this combination of engineering and ecological expertise opened up new possibilities for whole swathes of the country that had been despoiled by industry (Hackett, 1977; Handley, 1996; Bradshaw and Chadwick, 1980).

Infusing all these trends was the emergence of the sustainable development discourse, popularised in 1980 by the World Conservation Strategy (IUCN et al, 1980), and firmly established in 1992 by the United Nations Conference on Environment and Development. By the close of the 20<sup>th</sup> century, all areas of policy were being expected to demonstrate

their contribution to more sustainable living. This point is re-visited later on, but it is clear that in the later part of the 20<sup>th</sup> century, landscape planning was responding to major changes in society, economy and technology. In many respects, it was still a 'toolkit' in search of a coherent purpose; as Choy (2008) has noted, practice in landscape planning has a tendency to run ahead of theory. The final sections reflect on the ways that landscape planning is achieving coherence both conceptually and practically.

# People and Place

Town planning is centrally concerned with the mediation of space and making of place. Such an approach is 'without frontiers', because it is concerned with globalising forces, polycentric city regions and indivisible social-ecological systems. Equally, it can be concerned with intimate localities, in which reduction and compartmentalisation of environmental and governance systems have little meaning. Traditionally, the practice and mindset of landscape planning has been 'bounded' in three main ways, namely:

- it has relied on a designatory approach, with fine landscape lying inside the boundary and unexceptional landscape, meriting little attention from planners, lying outside;
- it has separated rural areas (which may possess 'natural beauty') from more urbanised areas (whose green spaces may possess 'amenity');
- it has been a 'sector', governed in a dis-integrated way by single agencies, with little input from stakeholders and the public.

Over a period of years, landscape planning has begun to move beyond these traditional binaries.

Mediating polyvalent space and creating identifiable places requires an institutionally and conceptually integrated approach, in which landscape is itself an 'integrating framework'. The potential for landscape to integrate reflects its properties as a complex and multifunctional system, in which ecological, physical, social and economic processes combine (Selman, 2006). This perspective draws on a longer tradition of 'systems

thinking' in land use transportation planning (McLoughlin, 1969), drawing originally upon General Systems Theory. Paralleling urban planning, landscape scientists were similarly influenced by the ecosystem approach which, whilst dating from the 1930s, effectively caused a 'paradigm shift' in the 1960s (Golley, 1993). Although planning and ecological discourses tended to remain separate, they have become more closely aligned through theories about the resilience of social-ecological systems at the landscape scale (Matthews and Selman, 2006). Realising this integrative role requires that planners understand landscape as something with hidden depths and intricate interrelationships, where the visual scene is merely a surface manifestation of natural dynamics and human stories. This perspective was engagingly depicted in Natural England's publication Landscape: Beyond the View, which argued for 'the conservation, adaptation and enhancement of the natural and built environment... better managed to meet society's needs and respond to forces for change, but within environmental limits... a landscape where sense of place is being enhanced, biodiversity is increasing and a healthy local economy is supported' (Natural England, 2006, p.16).

In many regards, the evolution to a more comprehensive and integrative style of landscape planning is merely an elaboration of ideas espoused by McHarg and others. However, it is capitalising on several decades of experience in landscape ecology, stakeholder engagement and resilience theory. Latterly, signatories to the European Landscape Convention have been challenged to re-assess their traditional practices, even where well developed, in the light of the Convention's articles. In essence, the ELC promotes a style of landscape planning in which protection of special landscapes and strong forward-looking action to create new ones are given equal emphasis. It sets a context within which the three traditional binaries of landscape planning noted above – 'best and rest', urban-rural and stovepipe governance – can be transformed.

First, the understanding of designations has been changing from one of protectionism to one of exemplifying virtuous relationships between sustainable management, celebration of landscape character, pride in place, and endogenous economic development. In the UK, modern landscape planning really starts with the 1949 National Parks and Access to

the Countryside Act and, since then, national designations have been supplemented by a raft of local ones (Scott and Shannon, 2007). This legacy is seen by some as an essential precaution to prevent the dissipation of distinctive traditional heritage, and by others as 'legal "living fossils" which do not reflect the way in which thinking has moved on'. (Bishop et al, 1997; p102).

The designation principle cannot easily be dismissed, if only for pragmatic reasons such as complying with international legislation and empowering planners with 'lines on maps' (which are often necessary for consistency in decision and enforcement). 'Special areas' remain an essential complement to wider countryside strategies (Selman, 2009), and the spirited response from their defenders has been continually to reinvent them, away from amenity preservation and towards the emerging discourse of sustainable development (Holdaway and Smart, 2001; Janssen, 2009). Rather than providing a greenwash of prettiness, 'special areas' are becoming greenprints for sustainability (McEwen and McEwen, 1987). The new Scottish National Parks have confounded sceptics by quickly asserting an innovative role in balancing landscape custodianship with sustainable development. The creation of new national parks in England (New Forest and South Downs) reflects the reinvigorated case for safeguard and sound management, and affirms the relevance of the protected areas model in the lowlands as well as the uplands. Areas of Outstanding Natural Beauty have been strengthened as a positive designation through the creation of Boards and a requirement to produce management plans (under the Countryside and Rights of Way Act, 2000).

Equally, the marginalisation of non-designated areas that occurred during the 20<sup>th</sup> century is now being redressed by the principle that 'all landscapes matter' (Natural England, 2008). The stimulus for territorially comprehensive landscape planning has largely been associated with the remarkably rapid acceptance and widespread application of Landscape Character Assessment (LCA) and cognate approaches. In marked contrast to the episodic and half-hearted uptake of previous landscape survey approaches, characterisation has been widely conducted according to a consistent methodology and incorporated into local development frameworks and regional strategies. This mirrors the

European Landscape Convention principle that landscape character is everywhere, and that signatories should analyse the characteristics of their entire landscape and its transformative forces and pressures. The principle continues to evolve and is now being extended to seascapes, with the coast becoming the new frontier of landscape mapping and the land-sea subsystem being integrated into the wider social-ecological system (Hill et al, 2001; Winn et al, 2003).

Second, the division between town and country has become increasingly blurred as 'heavy' industry has declined, and a renewed emphasis has been placed on urban liveability. Whilst amenity and natural beauty are still widely enrolled terms, their meaning now implies the numerous contributions that multifunctional greenspace can make to human survival and quality of life. Thus, Pauleit (2003) has noted that greenspaces can shape the character of a city and its neighbourhoods, provide places for outdoor recreation, and have important environmental and human health functions. The recognition of landscape's multifunctional potential spanning both town and country started in earnest with the growing influence of ecological design. Here, the Dutch landscape movement was particularly influential (Ruff, 2002), albeit one which has proved difficult to embed in the minds and actions of local authority greenspace managers. Thus, in contrast to the 'unnatural' highly modified and managed urban landscapes – which are still eminently appropriate to certain situations – there was a growing advocacy of 'natural' greenspace, provided according to an Accessible Natural Greenspace Standard (Harrison et al, 1995; Pauleit et al, 2003; McKernan and Grose, 2007). This has been complemented by rapidly developing knowledge about the role of corridors, nodes and matrix in the wider countryside (Bennett, 2003) and cities (Kazmeirczak and James, 2008). Increasingly, urban-rural continua of blue-green multifunctional systems are being promoted in relation to sustainable drainage, climate change, wellbeing and health, property values, employment and other issues (Gill et al, 2007; James et al, 2009; Maas et al, 2006). Latterly, there has been an awareness of the 'rural' roles that can be performed by urban landscapes – such as affording outdoor recreation opportunities that minimise carbon use and maximise social inclusion, amenity and productive woodlands, promoting biodiversity on roofs and in gardens, and

producing food (Thomson et al, 2003; Angold et al, 2006; Tzoulas et al, 2007), assisted by the 'bridging' potential of the urban fringe (Gallent et al, 2004, 2006). These are now being systematically reflected in the more enlightened green and open space and green infrastructure strategies (CABE Space, 2009), although planners still do not always grasp the scale and quality of provision necessary for the effective delivery of ecosystem services.

The Community Forest programme, together with the creation of a new National Forest and Central Scotland Forest, has helped to reconfigure multifunctional land cover over extensive urban fringe areas and provide new settings for conurbations. Their success in practice has been mixed because of the spatially uneven opportunities to achieve public goals on mainly private land (Land Use Consultants/SQW, 2005). Objectives can usually only be achieved where social-economic 'drivers' – such as farm diversification opportunities, mineral restoration, development 'gain' and reclamation programmes – converge with landscape objectives. In central Scotland, new woodland programmes are intended to create functionally integrated networks designed in collaboration with stakeholders and the wider public (Land Use Consultants, 2008).

Third, landscape has been instrumental in reducing the 'silo mentality' of environmental governance. For a long time landscape has been treated as a separate sector, barely adequately addressed through the land use planning system. This led to unfavourable comparisons with legislatures in other countries, notably Germany, where landscape appraisal had been a vital component of the planning system since 1973, has informed a suite of actions from regional development to the positive enhancement of local environments (Punter and Carmona, 1997), and where construction law recognises landscape planning as an important tool for protection, maintenance and development (von Haaren, 2002).

Although sectoral approaches have dominated countryside planning, the late 20<sup>th</sup> century saw a progressive emphasis on joined-up governance. This has enabled a better accommodation of landscape considerations within areas such as forestry, transport and

housing policy, not only to reduce their negative effects, but also to capture significant benefits for creation and enhancement. The trend towards integration led, amongst other things, to the merger of landscape agencies and nature conservation agencies in Wales (1990) and Scotland (1991) and England (2006). Character mapping has also facilitated integrated governance, as landscape character areas have proved remarkably compatible with ecological zones. In England, the former 'Natural Areas' (Porter, 2004) were combined with landscape attributes, into National Character Areas, with similar outcomes in Scotland; in Wales, the LANDMAP system has integrated aspect layers on ecological, physical, cultural and economic topics from the outset (Owen and Eager, 2004). Further, Historical Landscape Characterisation (Macinnes, 2004) is extending our appreciation of time-depth beyond 'sites and monuments' and is disclosing the legibility of place, both in town and country.

Further, the engagement of stakeholders and public has evolved steadily if sporadically in landscape planning. The IUCN has promoted it as an essential ingredient of protected area management (Price, 2002) whilst participation has often been encouraged in the inventory (Scott, 2002) and sustainable use (Selman, 2004) of more ordinary landscapes. There have also been experimental transdisciplinary approaches in which experts and stakeholders fuse codified and local knowledge in the framing of landscape futures (Tress and Tress, 2003). Again, reflecting the requirements of the ELC, landscape planning is becoming a systematically more democratic enterprise, and opening up new opportunities for place-centred social learning.

#### **Reconnection and Regeneration**

By the start of the 21<sup>st</sup> century, landscape planning had achieved an important status and accumulated an impressive toolkit. Yet it is debatable whether it had acquired a clear conceptual coherence. Whilst the initial discourse of landscape planning had centred on the spiritual zenith of awe-inspiring uplands and painterly lowland valleys, this focus is potentially elitist and exclusive, and is an insufficient basis for professional or theoretical advancement. One consequence of the 20<sup>th</sup> century legacy is that the UK has developed mature and elaborate modes of protection but

has only achieved relatively localised success in landscape planning in the ELC's sense of 'strong forward looking action'. One writer to express this frustration was Turner (1998). Addressing the landscape context of major development categories – public open space, reservoirs, agriculture, minerals, forests, rivers, transport and urbanisation – Turner rebuked the obsession with impact mitigation and examined, instead, the scope for more creative design within an acceptance of landscape change. His assessment of landscape within planning captures a contemporary and continuing vein of concern – that planning control has a habit of fostering uniformity and blandness whereas the key professional challenge should be that of promoting distinctiveness and integrity. By treating landscape as the primary context rather than an afterthought, Turner argued that land use change could be accommodated in ways that promote character, identity and placeness. Key writers have consistently averred that the purpose of landscape planning is to promote ways of living in sustainable relationship with land and water, so as to reinforce human prosperity and wellness. This cannot be achieved simply by shoring up obsolescent agricultural practices and mitigating development by 'landscaping'.

The re-positioning of landscape within the sustainable development agenda (Roe, 2007), reflects the fact that landscape's systemic properties place it at the centre of actions regarding ecosystem services and environmental change. Writers such as Thayer (1994) have rekindled the 'land ethic' as a principle for landscape planning and management. At a policy level, landscape has been seen to underpin 'natural capital' (Haines-Young et al, 2006), supplying non-market or public benefits (e.g. biodiversity, carbon-sequestration, health benefits, property values, urban microclimate, regeneration and social cohesion), and supporting a range of ecosystem services (Millennium Environmental Assessment, 2005).

It has been suggested that there are five dimensions to sustainable landscapes (Selman, 2008). There is environmental sustainability, strongly influenced by landscape ecology's concern with spatial patterns and processes (e.g., Farina, 2006) and the enhancement of a fragmented and degraded matrix (Taylor Lovell and Johnston, 2009). The economic sustainability of landscapes has often been expressed as the maintenance of attractive

scenery to support tourism and recreation. However, this limited (albeit important) view fails to reflect the significance of "virtuous circles" where endogenous, spontaneous economic activities are mutually coupled to sustainable landscape services (Powell et al. 2002; Selman and Knight, 2006; Vollet et al, 2008). Social sustainability in landscapes is often addressed in terms of participation and inclusivity in decision making and access (Moore-Colyer & Scott, 2005). In addition, a deeper understanding of 'peopled' landscapes is emerging which concerns their legibility, narratives, customary laws and social learning potential (Ingold, 2000; Olwig, 2005). The political sustainability of landscape requires effective governance structures, involving both insiders and outsiders, and bringing together partnerships between private, public and third sectors. Aesthetic sustainability is uniquely important to landscape, not only because visual amenity has been a longstanding mainstay of policy, but also because it is often assumed to indicate healthy functioning of underlying systems. Thus, there may be a 'fitness' of appearance between the human and the natural (Carlson, 2007), and need for intelligent care of aesthetic attributes based on a deep appreciation of underlying dynamics (Iverson Nassauer, 1997).

It is proposed here that the emerging purposes of sustainable landscape planning can be encapsulated as regeneration and reconnection. The practice of land regeneration is not new, and it has been seen in the re-modelling of postindustrial areas (Greenhalgh and Shaw, 2003), garden festivals (Holden, 1989), and the investment landscape of inner urban areas and docklands (Moore, 2002). The potential of landscape to regenerate and re-inspire, and the planner's role in this, were persuasively articulated by Fairbrother (1970). Whilst the restoration and rehabilitation of sites has often resulted in bland and predictable landscapes, examples such as the Emscher Park demonstrate what can be achieved in terms of place-creation and land-healing through ecological processes (Shaw, 2002). There is a growing acknowledgement that regeneration is about more than physical reclamation techniques and, whilst physically successful remediation technology is still crucial, regeneration is a wider process that capitalises on the multifunctionality of social-ecological systems (Ling et al, 2007). Unsustainable land use leads to degenerative landscapes. Wise stewardship promotes regenerative and resilient

landscapes (Lyle, 1994), supported by a range of regenerative design techniques (Melby and Catchart, 2002).

Reconnection – of natural systems and of people with place – draws upon landscape's manifold and layered qualities, and its spatial and systemic integration of a range of functions (Naveh, 2001). People in technologically advanced societies have become disconnected from daily reliance upon and contact with nature, and it has been widely suggested that this leads to loss of attunement to natural systems. Hence, there are arguments in favour of social reconnection, instilling awareness and care of local landscape, promoting attachment to and pride in place, and encouraging the nurture of landscape services for their long-term economic and human benefits. Physical disconnection has also occurred, notably through the emergence of urban heat islands, fragmented habitats and corridors, and disruption of hydrological connectivity by 'sealed' urban surfaces.

A connected 'green infrastructure' is now seen as a key delivery vehicle for landscape multifunctionality, re-establishing links across the urban-rural continuum (Kambites and Owen, 2006; Mell, 2009). Although some green infrastructure projects have merely rebadged amenity open space and corridors, a more strategic and embedded approach is emerging. In this, generous swathes of green also incorporate the blue (surface and ground water) and the invisible (airsheds). Particular opportunities for reconnection are associated with sustainable urban drainage systems, habitat networks, urban gardens, and climatically inspired planting strategies. There are also plausible grounds to suppose that democratised styles of landscape planning will encourage people to care for local environmental goods and services, raise consciousness of the interdependence and dynamics of social-ecological systems, and afford opportunities for social learning by engaging with practices of wise environmental stewardship in familiar and valued settings.

### Conclusion

As the 20<sup>th</sup> century drew to a close, Punter and Carmona (1997) found that local authorities' landscape policies generally remained conservative and unadventurous. British practice continued to rest, in the main, on a superficial understanding of landscape, leading to its treatment as a simplistic constraint on site development rather than as something which could realise the unique potential of place. Thus, despite decades of achievement, the 20<sup>th</sup> century still closed with a sense of missed opportunity. By contrast, in 2005, Adrian Phillips remarked that landscape had 'come in from the cold'. Instead of hovering on the periphery, landscape had become central to the search for more sustainable ways of living, for four reasons:

- landscape is universal concern for landscape is no longer confined to what is conventionally considered as the most beautiful or 'least spoilt' landscapes;
- it is dynamic landscapes inevitably change and evolve over time through natural and social causes, and should not be 'frozen';
- it is hierarchical landscape is like a 'Russian doll' of nested scales;
- it is holistic landscape cannot be understood or managed except through an integrated, multi-disciplinary approach, which embraces all its ecological, cultural and social components (Phillips, 2005).

It is thus a medium through which people and nature can be (re)connected.

It is suggested here that landscape planning is currently evolving in three key ways. It is consolidating an essential toolkit of practices, around characterisation, impact assessment, economic valuation and democratisation. It is cohering conceptually around the need to steward and reconnect social-ecological systems in a sustainable and integrated way so that they remain resilient and regenerative. It is rebalancing the roles of 'protection' and 'planning', learning from past and present greenprints in order to create places which touch lightly on the earth and enhance quality of life. Natural beauty and amenity are still relevant, but planners need to see beyond the view and, rather than merely gazing in a detached way on a pretty scene, infer underlying landscape resilience from visual cues.

A pre-eminent policy impact of the 21<sup>st</sup> century has been the European Landscape Convention. In some respects, the ELC appears to add little to the current landscape planning agenda in the UK, and it was eventually ratified by the government on the presumption that only a minimal adjustment was required in order to achieve compliance. This was probably a misperception, as the ELC has a genuinely radicalising potential. For example, it directs attention at all landscapes and requires that people should be actively involved in setting objectives for their future. Similarly, it affirms the idea that different approaches are necessary in different contexts, whether protection, management or planning, or some combination of these. Planning is defined in terms of strong forwardlooking action, ensuring that it is relevant in damaged and unattractive landscapes as well as in more obviously aesthetic ones. It is a striking attempt to move beyond the best-andthe-rest view of landscape, and to orchestrate democratised action relative to an area's character and condition. The ELC is also eminently consistent with the emerging emphasis on multifunctionality and sustainability.

Thus, from being a Cinderella specialism, landscape is starting to realise its potential as an integrative framework, central to conservation, growth and regeneration in both town and country. It is at the heart of many of the most important themes of contemporary planning – sustainability, quality of life, place-making, attracting inward investment and healthy lifestyles. The properties of landscape character, distinctiveness and resilience provide a framework for achieving place-based integration across multiple planning goals.

The origins of landscape planning in Britain lay in anti-industrialism; nowadays, vigilance against the irreversible loss of the finest scenery to unsustainable development remains as necessary as ever. Yet the emphasis of contemporary landscape planning is associated far less with prevention, and more with the positive potential of landscapes to reinforce pride in place and environmental sustainability. Indeed, in a post 'smokestack' economy, many forms of economic production are not only compatible with landscape, but may even drive valued cultural landscapes of the future. Thus, whilst landscape

planning has provided a priceless legacy of national parks and other protected areas, it must continue to evolve beyond this restricted focus.

In a sense, landscape planning continues to identify with its two traditional pursuits: the safeguard of natural beauty and the provision of amenity. Although semantically these terms may appear quaint, they remain relevant and require only to be continuously reinvented. Thus, natural beauty must be taken to signify far more than the painterly scene. Visual harmony or dysfunction often infer the 'hidden' condition of underlying systems. Equally, we need to make conscious efforts to see beauty in the untidiness of nature, or the creative landscape potential of new economic land uses. Similarly, amenity has to be understood as more than 'pleasant circumstances or features'. Although a vague term, it is still the legislative catch-all, and thus needs to be accepted and related positively to our mature understanding of the factors which create conducive places. In this respect, amenity demonstrably relates to opportunities for safe and healthy exercise and play, reconnection with nature, environmental security in terms of climate change and water cycles, and the legibility and distinctiveness of public and private realms.

Whilst, however, the traditional canons of landscape planning remain valid, planners still need consciously need to wean themselves off tendencies to museumise an imagined past. The instinct to plan landscapes is grounded in preservationism, but the task of landscape planning is to recognise the potential of drivers of change to increase or diminish character and sustainability. Within a positive view of landscape planning, even protection and conservation are forward looking activities which accommodate sustainable change. In this light, we can offer some axioms for future practice.

First and foremost, landscape planning is applicable to all landscapes, not just to ones that are designated for special aesthetic merit. Broadly speaking, there are four strategies that can be applied to landscapes – conserve, reinforce, restore or create (Warnock and Brown, 1998). One or a combination of these will be applicable to every context, and will assist the promotion of landscape qualities for insiders and outsiders. Clearly, this does not mean the application of heavy handed state intervention to every square kilometre of

land – rather, it means the application of an intelligent blend of control, grant aid, advice, support, guidance, partnership, management and care, based on sensitivity to local conditions.

Second, landscape planning must concern the future as much as the past. It is clear that strict preservation is rarely appropriate or possible in cultural landscapes which have coevolved with human activity over many centuries. Even the most cherished traditional landscapes must therefore be stewarded in forward-looking ways, so that a learning society can appreciate their wider lessons about sustainability, and their delicate yet resilient balance between economy, culture and environment. Equally, some landscapes require extensive remediation in ways that respect local knowledge and environmental conditions, and balance a new identity with distinctive place legacies. Climate change is also becoming a driver to which positive response is essential – otherwise landscapes will deteriorate as they and their species experience stress from unfamiliar temperature and wetness regimes. Deliberating such futurescapes with existing stakeholders will provide a major challenge. Planners require a capacity to perceive change as something which can potentially create valid new landscapes possessing their own distinctiveness, rather than seeing 'landscaping' simply as a means of mitigating developmental impact.

Third, landscape is urban as well as rural. There is a well embedded legacy of planning for urban amenities, but a very limited tradition of managing them to their full potential as multifunctional resources. There is also a generally poor recognition of the extent to which the time-depth and legibility of the urban environment creates a sense of place, even within localities which the casual observer might dismiss as lacking interest or merit. Most fundamentally, cities of the future must touch lightly on the earth. A key element of this will be to forge a blue-green infrastructure of interconnected corridors and spaces across the city, delivering multiple ecosystem services. This needs to be of a scale that will demonstrably support the habitat and movement of a rich biodiversity, assist the improvement of local climates in a context of atmospheric warming, permit the operation of natural water cycles within acceptable levels of hazard, and appeal to residents as an

extensive and interesting destination for exercise and recuperation. It may also be a place of significant food production and energy generation.

Fourth, planners need to develop an appreciation that landscape is more than simply the 'view'. The landscape we see is merely the surface expression of underlying ecology and culture, in which visible character and distinctiveness provide a litmus test for deep-seated sustainability. In this respect, landscape provides the common ground for public, private and voluntary sector interests related to the change and conservation of urban and rural environments. Provided our understanding goes beyond a superficial appreciation of prettiness, then landscape affords a conceptual and spatial frame for integrating sectoral activities associated with construction, conservation of time-depth and wildlife, and natural resource production.

Landscape planning thus has an increasing intellectual coherence as a practice focused on the sustainable development of built and natural environments. This coherence reflects its applicability to town and country, past and future, local and regional, people and place, conservation and change, and nature and culture. It is integrally concerned with the promotion of distinctiveness, character and sustainability in all landscapes in ways that enhance people's quality of life and the maintenance of ecosystem services. It is thus a mainstream concern of all planners, rather than a peripheral specialism. Yet it could not have become any of these if it had not been for Wordsworth's celebration of scenic splendour, Hill's passion for natural beauty, or Muir's wonder at the sublime.

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