Disintegrated development at the rural–urban fringe: Re-connecting spatial planning theory and practice

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Abstract

The spaces where countryside meets town are often amongst society’s most valued and pressured places which together form the rural–urban fringe (RUF). A ‘messy’ yet opportunistic space in policy and decision making processes, the RUF remains confused and ‘disintegrated’ lacking sufficient understanding and explicit attention for sustainable management as places in their own right. This paper exposes the scope, nature and reasons leading towards policy disintegration within the RUF with critical attention on the separate lenses of the Ecosystem Approach and Spatial Planning frameworks reflecting a marked natural and built environment divide. Using research funded by the Rural Economy and Land Use programme, three ‘bridging’ concepts were identified within which improved integration is explored: Time, Connections and Values. Using team member thoughtpieces and workshops, together with visioning exercises in two rural–urban fringes, a series of narratives are presented within which the RUF opportunity is re-discovered set within a hybridised theory of spatial and environmental planning. In so doing the paper challenges established economic and planning models of urban development and expansion with more holistic ideas and approaches. One size-fits-all solutions such as greenbelts, regionalism or localism are rejected within an approach that champions multi-scalar and sectoral perspectives set within a governance framework that achieves social and economic well-being through maintaining and enhancing ecosystem functions and services. We conclude by arguing that policy strands within

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environment and planning must be better connected allowing the RUF to be developed as an opportunity space for testing and experimentation.

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Keywords: Spatial planning; Ecosystem approach; Policy disintegration; Rural–urban Fringe; Transdisciplinarity

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1. Introducing disintegrated development and the rural–urban fringe

1.1. Introduction

This paper re-discovers the rural–urban fringe (RUF) as a positive opportunity space within which we advance new ideas to re-connect the theory and practice of spatial planning. Our starting proposition is that the RUF represents a neglected and forgotten policy space, rarely being considered as a place in its own right with its own needs and priorities. Current academic and policy concern champions either the urban (see, for example, Cloke, Marsden, & Mooney, 2005; Curry, 2010; Goodwin, 2000; Halfacree, 1994; Phillips, 2010) domains at the expense of the spaces and interrelationships between them which, arguably, is where policy and decision making need to be improved and prioritised (Hodge & Monk, 2004; OECD, 2011). Consequently, governance arrangements are firmly entrenched and polarised between the built (urban) and natural (rural) environment within what we term ‘disintegrated’ policy and decision making (Fig. 1); a concept first used by Shucksmith (2010) to problematise the evolution of rural development policy and practice. We argue that this phenomenon is now endemic in wider policy and decision making processes and exacerbated in fringe spaces.
Fig. 1 illustrates this disintegration culture schematically. Particular information and data are selected, valued and used according to the ‘lens’ of the user. Information flow is controlled and managed through key ‘gatekeepers’ whose frameworks ensure that supportive forms of information are allowed to pass through. This ‘filtered’ information is then analysed and used to inform policy and decision making processes. However, the sectoral nature of policy and practice means that many separate and individual decisions are made in isolation. Each decision brings with it both intended and unintended consequences. Thus, the cumulative impact of all these decisions shapes the chaotic, complex and contradictory spaces that are not easily deconstructed (Curry, 2008; Ilbery, 1991). Furthermore, top-down imposition of change can also occur through the active intervention of government and/or powerful stakeholders who manipulate or bypass the main institutional gatekeepers and systems through their power and influence, thereby further complicating the decision making picture (e.g. Cowell, 2003; Phelps & Tewdwr-Jones, 2000). Finally, there is also the occurrence of chance or random events or disasters that generate policy change such as the 2001 foot and mouth outbreak (Scott, Midmore, & Christie, 2004). This resultant ‘sea’ of complexity inhibits social learning due to the lack of effective and open evaluations built into the decision/policy making interventions (Hodge & Midmore, 2008). Thus we witness an institutional landscape characterised by uncertainty and conflict (Rauws & de Roo, 2011), where institutional change merely adds further layers to existing governance rather than transforming it (Ward, 2006, chap. 3). Curry (1993) has captured this within what he calls the fallacy of creeping (institutional) incrementalism.

In response to such thinking we can chart academic and policy commentators calling for more integrated and joined up development responses (Curry, 1993; Edwards, Goodwin, Pemberton, & Woods, 2001; Ward, Donaldson, & Lowe, 2004). This resonates with much of the discourse associated with integrated rural development in the 1980s (e.g. Shucksmith, 2010; Ward, 2006, chap. 3) and can be traced through the subsequent discourses in rural restructuring, sustainable development and multi-functionality (Scott, Gilbert, & Gelan, 2007).

In contemporary parlance, two paradigms have been advanced and operationalised within interdisciplinary thinking and frameworks. Both represent alternative and competing lenses within which to view, manage and improve policy and decisions; as each champions their
particular approach with academic and professional alliances. Thus the built environment lens is articulated through the concept of spatial planning (SP) (Nadin, 2007; Tewdwr-Jones, Gallent, & Morphet, 2010), whilst the natural environment lens is articulated through the ecosystem approach (EA) (NEA, 2011; UNCBD, 2010). Given the centrality of these paradigms to this paper, they are now briefly unpacked.

1.2. Spatial planning

Spatial planning (SP) has been described as nothing more than ‘applied common sense’ (Collier, 2010). However, its rather uncritical use as an overarching term for a panoply of planning regimes and approaches, with its attendant definitional variants, has resulted in conceptual vagueness and highly variable application and understanding amongst the planning and built environment professions and wider public(s) (Allmendinger & Haughton, 2009). This has led to some commentators even claiming that the ‘SP project’ has failed (Scott, 2010a; Taylor, 2010). In theory SP represents a transformation from traditional notions of planning driven by land-use allocation and design emphasising control and restraint, towards more proactive, positive and holistic emphases involving multi-scalar and multi-sectoral perspectives (Table 1).

Thus planning is transformed into a proactive agent of positive social, economic and environmental change (Albrechts, 2004; Tewdwr-Jones et al., 2010). This has been crystallised by Healey (2010, p. 19) in her definition:

- “An orientation to the future and a belief that action now can shape future potentialities.
- An emphasis on liveability and sustainability for the many, not the few.

- An emphasis on interdependences and interconnections between one phenomenon and another, across time and space.
- An emphasis on expanding the knowledgeability of public action, expanding the ‘intelligence’ of a polity.
- A commitment to open, transparent government processes, to open processes of reasoning in and about the public realm.”

Stemming from the European Spatial Development Perspective (ESDP) and implemented in England within the 2004 planning reforms (Planning and Compensation Act), these ideas, arguably, represented a major culture change in the process and outcomes of planning set within the ‘making of place and mediation of space’ (RTPL, 2001). This posed key challenges in integrating spatial policy between different sectors and scales, breaking down departmental and organisational barriers (Morphet, 2010; Nadin, 2007). The importance of the ‘spatial’ is significant here; signifying both static and dynamic interpretations of the ‘where’ of things, the creation and management of place (placemaking); the interrelations between different activities in an area, and significant intersections and nodes within an area which are physically co-located (Albrechts, 2004). This shifts the focus of attention on to the networks and connections between places and people from the places themselves (Hodge & Monk, 2004).

1.3. The ecosystem approach

The Ecosystem Approach (EA) is defined by UNCBD (2010, p. 12) as “a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way”.

Under the Convention on Biological Diversity there are 12 core principles that underlie the EA.

<table>
<thead>
<tr>
<th>Sectoral</th>
<th>Cross-sectoral integration</th>
<th>Integration of different public policy domains within a territory</th>
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<td>Inter-agency integration</td>
<td>Integration of public, private and voluntary sector activity within a territory</td>
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<td>Territorial</td>
<td>Vertical integration</td>
<td>Integration between different spatial scales of spatial planning activity</td>
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<td>Horizontal integration</td>
<td>Integration of spatial planning activity between adjoining areas or areas with some shared interest</td>
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<td>Organisational</td>
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<td>Integration of spatial planning with other strategies, programmes and initiatives within a territory</td>
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<td>Operational integration</td>
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<td>Disciplinary/stakeholder Integration</td>
<td>Integration of different disciplines and stakeholders within a territory</td>
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“The objectives of management of land, water and living resources are a matter of societal choice.
Management should be decentralized to the lowest appropriate level.
Ecosystem managers should consider the effects (actual or potential) of their activities on adjacent and other ecosystems.
Recognizing potential gains from management, there is usually a need to understand and manage the ecosystem in an economic context.
Conservation of ecosystem structure and functioning, in order to maintain ecosystem services, should be a priority target of the ecosystem approach.
Ecosystem must be managed within the limits of their functioning.
The ecosystem approach should be undertaken at the appropriate spatial and temporal scales.
Recognizing the varying temporal scales and lag-effects that characterize ecosystem processes, objectives for ecosystem management should be set for the long term.
Management must recognize the change is inevitable.
The ecosystem approach should seek the appropriate balance between, and integration of, conservation and use of biological diversity.
The ecosystem approach should consider all forms of relevant information, including scientific and indigenous and local knowledge, innovations and practices.
The ecosystem approach should involve all relevant sectors of society and scientific disciplines”.


Waters (2010, p. 2) argues that this represents a fundamental culture change in the way we manage, value and pay for our natural and built environments: “it will involve a move away from species and site based conservation, in which nature is fitted in around the other things people do, to truly integrated land and sea management for the benefit of people and society”. The importance of holism, long-termism, complex adaptive systems, social inclusion and social learning are stressed within the literature (e.g. Bull, Petts, & Evans, 2008; Fazey & Schultz, 2009; Gunderson & Holling, 2001; Haines-Young & Potschin, 2007; Plummer & Armitage, 2007).

Within the EA, the natural environment has been conceptualised in relation to the goods and services that nature provides for humans as ‘ecosystem services’ (e.g. NEA, 2011) which appears to have become the dominant term, though some distinguish between ecosystem functions, goods and services (e.g. de Groot, Wilson, et al., 2002). Ecosystem services are grouped as: supporting services (necessary for the production of other ecosystem services; e.g. soil formation, photosynthesis and nutrient cycling); provisioning services (ecosystem products; e.g. food, fibre and water); regulating services (including processes such as climate stabilisation, erosion regulation and pollination); and cultural services (non-material benefits from ecosystems; e.g. spiritual fulfilment, cognitive development, landscape and recreation) (Millennium Ecosystem Assessment, 2005; NEA, 2011). The ecosystem services literature emphasises the dependence of human well-being on ‘natural capital’. This highly anthropocentric approach focuses on what humans depend on and can get from nature. In this way, it connects the human population, including the majority who now live in urban environments, with their wider environment. It emphasises human dependency upon the environment, viewing nature as a life support system which humans disrupt at their peril, rather than a luxury to be enjoyed by those who can afford to protect it (Box 1). Yet there is also an inherent danger that the concept of ecosystem services is used in a highly superficial way to mask or avoid the need for more fundamental changes in thinking and behaviour. Norgaard (2010, p. 1219f) considers the “transition from metaphor to scientific framework” and warns of its potentially blinding effect through too-simplistic assumptions and persistence of an economic growth-driven policy model and limited use of ecological and systems-based frameworks to deal with the actual problems of overconsumption. He argues for the need for substantial institutional changes to significantly reduce human pressures on ecosystems and to invest in/develop multi-scalar environmental governance structures.

Rather than just focusing on ecosystem services, we need to realise that, crucially, the EA contains within it the notion that humans are an integral part of nature and not separated from it. Although the impacts of urban areas on ecosystem services have been well documented (e.g. Lorenz & Lal, 2009; Sanford, Manley, & Murphy, 2009; Schneider, Friedl, & Potere, 2010), there have been very few attempts to use an ecosystem-based framework in a spatial planning context to consider how future development may minimise negative effects on the provision of ecosystem services (Nowicki, Young, & Watt, 2005).

Although the ecosystem services concept aims to conceptualise the complex links between ecosystems and human well-being, it only covers natural capital and does
not consider the role of adaptation strategies based on human, physical, social or financial capital to protect human well-being in the face of future change (Spash, 2008). The EA, therefore, attempts to consider the social, economic and political–cultural context of ecosystem services. This recognises that different stakeholders value ecosystem services differently, and emphasises the importance of incorporating stakeholder perceptions, property rights and institutions within the sustainable management of ecosystem services (Spash, 2008). This requires the adoption of more participatory approaches incorporating ideas of community governance and ownership over particular ecosystem service management (e.g. Bryden & Geisler, 2007; Marshall, 2005; Quirk, 2007). However, the mushrooming of plans set against the artificial reductionism of different ecosystem services that might ensue raises important issues over the loss of the ‘bigger picture’ (Scott, 2006).

The conceptual challenge is therefore to broaden the planning process through new environmental emphases to consider likely impacts of developments on a much wider range of ecosystem services than is currently done. Here, appropriate assessments through Strategic Environmental Assessments (SEA), Environmental Impact Assessments (EIA) and Habitat Regulations Assessments (HRA) provide a useful role measuring impacts where they are likely to be felt; e.g. considering downstream effects and habitat connectivity to facilitate

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**Box 1. The ecosystem approach concept.**

![Diagram of the ecosystem approach concept](image)

movement of species under climate change, whilst retaining high levels of stakeholder engagement (Therivel, 2009). This may include the prioritisation of ecosystem services by the public to reflect regional differences in people’s values (Christie et al., 2010). It may also require collaboration between landowners and managers across property boundaries to ensure that appropriate measures are taken to manage the potential effects of developments at a wider landscape scale (Selman, 2006; Prager, Reed, & Scott, 2011).

1.4. Exposing the built and natural environment divide

Significantly, both SP and EA paradigms have evolved separately, rooted within their well-established disciplinary and institutional histories and silos. These have shaped distinctive policy responses and institutional architectures which have exposed a significant urban/built versus rural/natural environment divide (Curry, 1993, 2008; Scott, 2012). This is at its most marked and pernicious in the RUF where both frameworks coincide in daily practice and decision making (Scott & Carter, 2012). Fig. 2 highlights how this divide is embedded in governance arrangements within England at all scales and, in particular, how the new institutional responses merely add to the complex governance patterns. This further fragments policy and decision making into particular silos and elites, exacerbating the disintegration of thinking across both sectors and scales. Thus the seeds of conflict are sown as strategies and plans are developed in agency or sector isolation (Scott, 2012). Understanding the roots of this divide within the UK context provides an important narrative from which we might attempt to intervene positively using interdisciplinary thinking and practice. However, such research endeavours and policy processes are themselves hampered by compartmentalised thinking concomitant with the need to continue to champion particular disciplinary approaches (Tress, Tress, & Fry, 2005).

The artificial separation of the built and natural environment in the UK was manufactured principally through post-Second World War planning legislation (Town and Country Planning Act, 1947) which created two planning systems: town and country planning (now associated with SP ideas) and resource planning (now associated with the EA) (Curry, 1993, 2008). Here, the imperative to control urban development was vested in town and country planning procedures, motivated by the rapid pace of suburbanisation in the inter-war period which generated a significant anti-urban ethic (Sharp, 1940; Williams-Ellis, 1938). The contrasting imperative was to revitalise rural areas by incentivising agricultural and forestry intensification, through resource planning functions motivated by wartime concern over food security (Curry & Owen, 2009; Scott & Shannon, 2007). These opposing philosophies of controls and incentives manufactured a clear divide, which subsequently has created significant tensions and incompatibilities in planning theory and practice across the two planning systems when and where they coincide at the RUF (Ilberry, 1991). This divide still persists today with integrated policies and actions remaining the exception rather than the rule (Scott, 2012). Indeed, the separate institutional architectures and landscapes of the divide have shaped much of the spatial complexity and challenge facing the RUF itself, where these two

### Natural Environment lens

1. Incentives
2. Natural Environment White Paper
3. Habitat and Landscape
4. DEFRA
5. Ecosystem Approach
6. Classifying and Valuing
7. Ecosystem Services Assessment
8. Nature Improvement Areas
9. Local Nature Partnerships

### Built Environment lens

1. Control
2. National Planning Policy Framework
3. Local and Neighbourhood
4. DCLG
5. Spatial Planning
6. Zoning and Ordering
7. Sustainability Assessments (SEA)
8. Enterprise Zones / Green Belts
9. Local Enterprise Partnerships

Fig. 2. The built and natural divide (Scott, 2012, adapted).
systems converge and often conflict in daily planning practice (Fig. 2; Scott et al., 2007).

This long history and continuing problem of separation means that the connections between SP and EA remain poorly developed and explored, which has hindered effective communication, management and resolution of environment conflicts and opportunities, furthering polarisation between development and conservation viewpoints, priorities and goals (Cowell, 2003). Surprisingly, few attempts have been made to explore the synergies and interdependencies between SP and EA approaches to managing the built and natural environment although Nowicki et al. (2005), Opdam, Foppen, and Vos (2002) and Harris and Tewdwr-Jones (2010) have all briefly flirted at this policy interface. Sharp and Clark (2008) believe that this is due both to the lack of researchers who actively locate their work within this interface and to the lack of studies on the fringe and the publics who reside and work there which, in itself, is a further manifestation of the disintegrated nature of academic research. The continued policy ‘disintegration’ has obfuscated any vision of what kind of RUF we want and how we might facilitate this in practice.

The quest for improved understanding of the RUF becomes all the more compelling given that the RUF now represents one of the dominant spaces of the contemporary landscape both in UK and global contexts (McKenzie, 1997; OECD, 2011; Rauws & de Roo, 2011). Yet the context within which the RUF is located is rooted in strong separatist forces which increasingly lead to these spaces becoming forgotten and marginalised (Qviström, 2010). Our approach in this paper, therefore, is to confront this management challenge directly through using the experience and insight from research funded by the Rural Economy and Land Use (RELU) programme on environmental change in the RUF.1 Using core evidence from literature reviews and primary field data from visioning and workshops, we unpack the disintegrated character and nature of the RUF. The paper proceeds with a literature review highlighting the challenges for the RUF space, identifying important lessons from past policy interventions. We then detail how our transdisciplinary approach can address these challenges, presenting the results in a series of narratives highlighting both disintegrated and integrated examples. The conceptual framework behind this research, incorporating Time, Connections and Values, is then critically discussed and posited as a means to develop a metatheory within which to improve policy and decision making across the built and natural environment in general and the RUF in particular.

2. The rural–urban fringe: problem or opportunity space?

“If we want to change the landscape in important ways we shall have to change the ideas that have created and sustained what we see” (Meinig, 1979, p. 42).

The zone where a city or town meets the countryside is ubiquitous, dynamic and highly diverse (Low-Choy, Sutherland, Gleeson, Dodson, &, Sipe, 2008; Pryor, 1968; Ravetz, 2010). Gallent, Andersson, and Bianconi (2004, p. 223) suggest that the key attributes of the rural–urban fringe are as follows:

- “a multi-functional environment, but often characterised by essential service functions;
- a dynamic environment, characterised by adaptation and conversion between uses;
- low-density economic activity including retail, industry, distribution and warehousing;
- an untidy landscape, potentially rich in wildlife”.

The seminal paper by Pryor (1968, p. 206) provides both an informative and comprehensive definition of this classic space of transition:

“The rural–urban fringe is the zone of transition in land use, social and demographic characteristics, lying between (a) the continuously built-up urban and sub-urban areas of the central city, and (b) the rural hinterland, characterised by the almost complete absence of non-farm dwellings, occupations and land use, and of urban and rural social orientation; an incomplete range and penetration of urban utility services; uncoordinated zoning or planning regulations; areal extension beyond although contiguous with the political boundary of the central city; and an actual and potential increase in population density, with the current density above that of surrounding rural districts but lower than the central city. These characteristics may differ both zonally and sectorally, and will be modified through time”.

Rather than containing any clear boundaries, the fringe is characterised by ‘fuzzy’ and permeable

1 ‘Managing Environmental Change at the Rural-Urban Fringe’ (RES-240-25-0016) was funded by Rural Economy and Land Use Programme (RELU) which is a collaboration between the Economic and Social Research Council, the Natural Environment Research Council and the Biotechnology and Biological Sciences Research Council, with additional funding from Defra and the Scottish Government.
boundaries within which ad hoc, iterative and haphazard development processes and changes occur at a variety of spatial and temporal scales (Qviström, 2007; Rauw & de Roo, 2011; Sullivan & Lovell, 2006). It is these extremes of change and continuity that differentiate this space from other rural and urban domains and, given the range of interests affected, can engender significant local contestation (e.g. Friedberger, 2000; Friedland, 2002; Scott & Carter, 2011; Weaver & Lawton, 2001). According to Ravetz (2010), such complexity and diversity reflects its multi-level, multi-sectoral, multi-functional and multi-scalar attributes, thereby rendering any generalities of the RUF fallacious (Bryant, 1995; Qviström, 2007).

Deconstructing the RUF, is a complex undertaking and can become a self-defeating exercise (Qviström, 2007). Indeed, there is a burgeoning number of terms advanced in the pursuit of a definitional ‘holy grail’; ranging from landscapes at the edge (Gallent, Bianconi, & Andersson, 2006); places of transition (Whitehand & Morton, 2004); heterogeneous mosaics (Allen, 2003); landscapes of disorder (Qviström, 2007); chaotic landscapes (Gant, Robinson, & Fazal, 2011); new geography of urban sprawl (Micarelli & Pizzoli, 2008); the last frontier (Griffiths, 1994); ephemeral landscapes (Qviström & Saltzman, 2006); edgelands (Farley & Roberts, 2012; Shoard, 2002); and forgotten landscapes (Scott, 2012). Collectively, these terms all signify an implicit ‘otherness’, heavily laden with negative overtones, implying that it is a “space waiting for something better to come along”. As Qviström (2007) laments, the landscapes of the RUF often remain uncertain; in limbo, waiting for plans to be fulfilled, decisions to be made, and ideas to be realised or development to be started. This negativity associated with the RUF also serves to obscure its true nature and potential, hindering more strategic and integrated policy responses (Scott et al., 2012a; Whitehand & Morton, 2006). This is exacerbated by a rapidly changing political, economic, environmental and social climate generating uncertainty, loose and rather simplistic definitions (Gallent et al., 2006), confused terminology (Sharp & Clark, 2008) and lack of clear delineation in research design and publications (Pryor, 1968; Qviström, 2007). Nevertheless, according to Gallent et al. (2006), such diversity and assemblage of different land uses and interests reflect its ‘uniqueness’ and creativity; a point reinforced by Spedding in a rare positive assessment Spedding (2004, p. 1):

“The fringe is not just the place where town meets country but a collection of dynamic and productive environments set in inspiring cultural landscapes, meeting the needs of both the present and helping to change the way we live in the future”.

Significantly, many definitions identify the RUF from the juxtaposition of land use characteristics and change alone, focussing on the hard and narrow ‘edge’ space where town meets country: but there is emerging work that looks more critically at the role of urban and rural interrelationships, values and perceptions that re-define and re-shape the RUF (e.g. Hodge & Monk, 2004; Phillips, 2010; Scott & Carter, 2011). Ravetz (2010, p. 3) observes:

“It has many definitions: e.g. urban fringe: urban hinterland: functional territory: urban–rural interface: rural–urban-region, etc. It is subject to many layers of influence from local to regional, national and global: it involves a wide variety of stakeholders, actors and institutions: and it shows levels of complexity, innovation, transition and emergence. It is shaped as much by socio-cultural discourses as direct functional relationships: and the peri-urban is often difficult to define with geographical boundaries”.

Such thinking transforms and expands the RUF zone of influence into areas which are generally seen as rural. However, rural and urban interests now coincide through the changing social structures and dynamics of countryside and urban change (Phillips, 2010). Here, rural land use functions and landscapes can be transformed by urban values and interests within a fusion of new commuter-style incomers or, perversely, can be recognised within cities such as Detroit where new rural-based lifestyles are emerging in the context of urban decline (Giorda, 2012).

This focus on either the urban or rural has resulted in two different literatures associated with the urban–rural fringe (Elson, 1986; Kirkey & Forsyth, 2001; Piorr, Ravetz, & Tosics, 2011) and the rural–urban fringe (e.g. Gallent et al., 2004; Gant et al., 2011; Qviström, 2007). This switch of emphasis from urban–rural fringe to rural–urban fringe is important as it signals a change in the way the space is viewed, challenging prevailing urban-centric values which portray the fringe as a transitory space for an ever-increasing set of urban-centred demands for housing, retail development, tourism, recreation and transport infrastructure. The rural-centric perspective opens up new narratives of development within the changing nature of rural–urban relationships, within reconstructions of fringe spaces as opportunities for woodlands, community food growing
and bio-energy as part of wider regeneration agendas (Rauws & de Roo, 2011; Scott et al., 2012a,b; Scott & Collier, 2012) (Fig. 3).

However, such rural-centrism is strictly limited in practice (Ambrose-Oji, Carter, Lawrence, & Moseley, 2012), further compounding the fragmented institutional interfaces and power relations that shape the contemporary landscape (Bryant, 1995; Friedland, 2002; Low-Choy et al., 2008). Hough, 1990, p. 88 observes:

“It has long been the fate of the rural landscape at the edge of the city to be the raw material for housing subdivisions, industrial estates, and mobile-home parks. The notion that urban development is the highest and best use for non-urban land is written into the lexicon of every urban planner. The changing scene at the edge and the placelessness that goes along with it has become a battleground between efforts to preserve rural land and the relentless forces of urbanisation”.

Given the dominance of the RUF in geographical space, its neglect in research and policy is surprising. Sharp and Clark (2008, p. 64) attribute this to its edge and boundary mentality which does not accord well with current agency organisation, disciplinary foci and specialisations and resultant work programmes. This also hinders effective data capture and knowledge about the quality and potential of the fringe space and the needs and priorities of the people who live there. Existing RUF research tends to be dominated by a US literature focusing on the ex-urban (Brown et al., 2008; Sharp & Clark, 2008) and by a UK literature and policy centred on the green belt and urban sprawl (Bovill, 2002; Gant et al., 2011; Whitehand & Morton, 2003). Rarely is the fringe considered in its entirety (see work by Gallent et al. (2004, 2006) as an important exception). This is all positioned within an urban-centric ideology focussing on urban chronologies, evolution, containment and form (Gant et al., 2011; Jenks, Burton, & Williams, 1996; Thrall, 1987; Whitehand & Morton, 2003, 2004). In particular, the concepts of the compact city (Jenks et al., 1996; Neuman, 2005), city regions (Ward, 2004) and SMART growth (Daniels, 2001) are becoming increasingly influential (Piorr et al., 2011) but, according to some, an unwelcome distraction (Qviström, 2007). Much of this research has been on chronologies of development, especially over long periods, with little attempt made to explore fringe belts in relation to decision-makers and decision making, or in relation to planning and development control (Whitehand & Morton, 2004, p. 276). Significantly, Gant et al. (2011) recognise
this within a wider narrative of RUF development and evolution using analyses of development control data.

The core RUF literature, therefore, collectively provides important evidence of a RUF besieged by problems of disintegrated policy and decision making set within a confused identity and character. Specific research case studies further illuminate the sometimes perverse policy contradictions and tensions caused by this. For example, Iberry’s (1991) research on diversification in the Birmingham RUF revealed that agricultural change and diversification were simultaneously both encouraged (agricultural policy) and resisted (planning policy) through a marked failure of policy co-ordination. Low-Choy et al. (2008), observing peri-urbanisation in Australia, reveal a significant disconnect between the current direction of planning approaches towards sustainable development and SMART growth, and the continued spatial fragmentation of landscape associated with new dispersed residential developments occurring in the rural fringe. Similarly, Scott, Shorten, Owen, and Owen (2009), drawing from a range of field-based visioning case studies across Wales, found that although there was marked convergence between the desires of RUF inhabitants and the general thrust of national planning policy, actual planning decisions on the ground were perceived to be ‘out of order’ due firstly to the large scale nature of developments and secondly the poor quality ‘homogenised’ and placeless nature of such developments. Here power and political influence are key drivers leading to the disintegrated nature of decision making in the RUF and which are vital yet neglected components in the understanding of contemporary landscape governance arrangements (Piorr et al., 2011; Scott, 2011a, 2011b).

In the quest for integration and simplification, however, Qviström (2007) sounds a note of caution about using professionally-led solutions that try to impose a particular order on the RUF, a landscape he sees characterised by inherent disorder and messiness. He argues that planners’ quest for spatial conformity might stifle the very innovation and creativity that adaptive management strategies now promote (Hardman, Larkham, Curzon, & Lamb, 2012). Here, actual and potential uses within the RUF can readily escape simple categorisation, being something in between; where the character and qualities do not readily conform to planners’ or ecologists’ professional values, yet they offer intrinsic value and benefits to society (Lefebvre, 1991; Adams, Hardman, & Scott, 2013). The Chemin de Fer in Paris represents a classic example of such RUF use (Foster, 2011). After thirty years of neglect, this rail line circling the inner rim of Paris has evolved into a 32-km long ecological feature attracting significant resident wildlife, forming a network of ecological habitat that has claimed former industrial sites across the city. This rail line’s ‘vacant’ status enables creative and unsanctioned (illegal) forms of human occupation; uses that are otherwise be unavailable in the city. This presents a unique urban, environmental and social ecosystem, rich in diversity and value. However, it is currently set within a contemporary planning discourse that seeks to re-establish conventional planning order, according to zoned uses and conventional regeneration plans.

It is, hardly surprising that the RUF is often portrayed as a negative space reflecting the failure of planning, rather than as a positive opportunity space within which more creative and innovative things might happen (Gallent & Shaw, 2008). Qviström (2010, p. 220) argues that “reinterpretations of the landscape discourse can reveal changing or competing ways of viewing the urban fringe. An investigation into the dichotomous ideals of Urban/Rural and Nature/Culture offers a point of departure for an understanding of this discourse”.

Indeed, it is here that we see proponents of SMART growth arguing for a densification model of the RUF that avoids suburban sprawl (Lainton, 2012). Recent initiatives such as Incredible Edible at Todmorden indicate that the concept of urban agriculture may have strong currency and resilience in the RUF, even serving as an exemplar for integrated development (Piorr et al., 2011). The starting point, however, is to consider the specific needs of the people and place themselves rather than impose particular solutions and it is this one basic tenet that has escaped much of the discourse about the future direction of research in the RUF (Sharp & Clark, 2008). In order to address this we need to learn the lessons from past policy interventions and research. This forms the focus of the next two chapters.

3. Learning the lessons 1: a historical urban-led narrative of RUF evolution and disintegration

This chapter looks back within an historical narrative of RUF evolution, seeking to learn lessons from past policy approaches both in global and western contexts in order to shape improved responses. The RUF as a concept is generally accepted as originating in the inter-war literature in the fields of sociology, geography and planning (Gant et al., 2011; Qviström, 2010; Whitehand, 1988), and within a decade it was receiving explicit academic attention in the USA (e.g. Burgess, 1925; Smith, 1937; Wehrwein, 1942, p. 217); the latter
described it as the ‘twilight zone’. This description is a powerful reminder that the RUF is a theoretical construct, rather than – in many urban or rural landscapes – a tangible reality. There are several theories or models that clearly explain the evolution of the RUF but, in reality, the RUF is a disintegrated collection of land uses and ad hoc policies applied in policy and practice; the true inheritor of the Burgess model’s ‘zone of transition’.

3.1. Rings and cities 1: Burgess and Chicago

Burgess, Hoyt and the Chicago School of sociology are still dominant in discourses on urban form and structure, with Burgess’s ‘concentric zone’ diagram of urban land uses still featuring heavily in aspects of education in urban form (Larkham, 2003). Although later modified (as sectors by Hoyt (1939) and multiple nuclei by Harris and Ullman (1945)) the original model of concentric zones, from the Central Business District through ‘zone in transition’ to working-class housing and residential and commuting zones, remains a simple and powerful concept (Burgess, 1925). It was developed with reference to urban Chicago, the laboratory of the Chicago School’s empirically driven research, and was firmly linked to the historical processes of this city’s development and expansion. Burgess built this model on a broad range of sociological research, leading him to think about relationships between social process and land use. He suggested “the phenomena of urban growth were a result of organization and disorganization... Disorganization is preliminary to reorganization of attitudes and conduct... In the expansion of the city a process occurs which sifts and sorts and relocates individuals and groups by residence and occupation” (Martindale, 1958, p. 23).

Nevertheless, this model has been characterised as “sketchy and muddled” (Carter, 1995, p. 127) and roundly criticised (for example by Sjoberg, 1965) especially in terms of its lack of universality. The model’s simplicity hid the complexity of real cities, and the realities of changing patterns of land use over time which tend to result in fragmentation, sometimes over relatively short periods. The model depended largely “on those processes which human ecologists called sub-social... but which seem to have simply been economic competition for a scarce commodity, that is, central city land” (Carter, 1995, p. 129). The outermost zone was poorly conceptualised: it was beyond the administrative city limits, and comprised suburbs or satellite cities. Its problem in this respect might be the US administrative structures whereby suburbs are often politically and socially separate entities, distinct from the parent city. Its limitation in respect of the present urban fringe research, despite its popularity, is that planning and land-use policy outweigh sociological processes and direct economic land-use competition.

One of Burgess’s most relevant points was his application to urban (and, by extension, peri-urban) phenomena of the ecological principle of succession. In any location, over time, there is a succession of land uses: what was once the urban edge becomes wealthy residential, working-class residential, industrial, and so on. Likewise his parallel of social organisation and disorganisation to metabolic processes reinforces the picture of the city as ever-changing; and the social processes have clear implications for organised and disorganised patterns of land use.

In fact, the sector development of the model may be more useful in contemporary contexts, given the popularity of planning for corridors of movement and development in the regional, national and trans-national context, and the application of theoretical models of development within them (Pratt, Chapman, Dickens, & Larkham, 2005). The late-1940s Copenhagen ‘finger plan’ is a useful city-scale exemplar (Denmark Egnspolakonteret, 1947) but true linear cities, on a larger scale, have not been implemented. On the sub-regional scale of a major city and its hinterland, the multiple nuclei model also has uses. The increasing development of edge- and out-of-town retail and business parks, for example, producing the phenomenon of the ‘edge city’ (Garreau, 1991), is more akin to this; and, on a smaller scale, the effects of farm diversification also result in small nuclei of more ‘urban’ uses in the rural hinterland. But these models still suffer from their original limitations, and the ‘beads on a string’ model, which Hall and Ward (1998) discuss in a range of contexts from the 1965/1969 Paris strategy to the ‘cities’ of Mercia, Anglia and Kent, may be much more useful in conceptualising patterns of appropriate land uses, including development and protection.

3.2. Rings and cities 2: fringe belts

In the case of the academic investigation of fringes as structural phenomena, there is a substantive and long-established literature exploring the formation processes and later fate of relict urban fringes now embedded within built-up areas. In parallel with the emergence of the general concept of the RUF, the existence of fringe belts, or Stadtrandzone, was first discussed by Louis (1936) in relation to the growth of Berlin. In particular this relates to a strand of research within geographical
urban morphology, as pioneered by Conzen (for example, in his ground-breaking 1958 study of the form of Whitby) and more recently developed by Whitehand and collaborators (Whitehand, 1967, 1988, 2001; Whitehand & Morton, 2003, 2004, 2006). It is thus rooted in structural conceptualisations of the form of cities, explaining that, at times of lulls in building activity, land-extensive uses tend to accumulate, forming ‘fringe belts’ around the edge of the urban area. Conzen (1969, p. 125) describes this phenomenon as “a belt-like zone originating from the temporarily stationary or very slowly advancing fringe of a town and composed of a characteristic mixture of land-use units initially seeking peripheral location. . . . In towns with a long history this geographical result emerging gradually from these dynamics is often a system of successive, broadly concentric fringe belts more or less separated by other, usually residential integuments” (see Fig. 4).

This model has been shown to be applicable to a variety of time periods, from the medieval fringe-belt of Alnwick (Conzen, 1960) to the Edwardian fringe-belt of Birmingham (Whitehand & Morton, 2003, 2004, 2006), and, increasingly, different socio-cultural contexts; see, for example, the work of Vilagrassa (1990) in Spain; Rodrigo Cervantes (1999) in Mexico; Ducom (2005) in France; Gu (2010) in New Zealand; and Whitehand, Gu, and Whitehand (2011) in China. Formative influences reach their zenith during economic downturns such as the early-twentieth century when land prices are depressed and low-density uses are less likely to be competitively priced out of the market. These uses are often institutional in nature but may also include the designation of open spaces or the expansion of industrial or utility facilities. Within a UK context, the Edwardian period is often considered to be a key exemplar of such a process; being the end of the rapid Victorian industrialisation and urbanisation, and before the wartime and inter-war social and financial crises.

Whitehand (2001, p. 108) observes that, in this historical context, fringe belts are not products of coherent plan-making or decision making, whether formalised or not.

“They are products of large numbers of separate decisions about individual sites. Indeed the decision-makers frequently had no knowledge of one another and almost invariably no conception of the way in which their decisions and those of others would in combination have the effect that we refer to as a fringe belt”.

Much of the recent work on such belts deliberately examines not only the historic processes of their formation, but a journey through a more recent planning history, one which is likely to be much more interconnected than would have been the case under the circumstances of earlier historical periods. In particular, it recognises that extensive fringe-belt plots are, by their very nature, likely to have come under increasing pressure for redevelopment more recently (Whitehand & Morton, 2006). Whilst acknowledging that this transition is inevitable (and to a significant extent encouraged by recent UK planning policy), this school of thought also emphasises the significance of such fringe-belts in the physical understanding of, and orientation around, many UK towns and cities and has called for their recognition within the planning framework as an additional decision making tool (Whitehand & Morton, 2003). There has been little response to this call. Yet the potential of fringe belts in terms of strategic value, ecological significance (Hopkins, 2012) and development potential is high, if only these sites can be identified and treated in policy terms as coherent wholes, rather than as discrete ‘windfall’ sites.

3.3. Rings and cities 3: green belts

One of the features that have had a major impact on historical processes of continued urban outward development in the UK has been the concept of the green belt. Originating in the 1930s, advocated for the London region in Abercrombie’s landmark reconstruction plans of the mid-1940s, and given national policy backing in a government Circular of 1955, they now cover some 1.6 million hectares, about 6% of the land area of England (DCLG, 2011). Not every town or city has a formal green belt designation, but at a time of high

![Fig. 4. Historic Fringe Belts, Innovation and Building Cycles (Whitehand, 2001, p. 105).](image-url)
pressure for new housebuilding those that do are now under pressure for new outward expansion as well as targeted development within their urban boundaries.

The classic study of urban containment by Hall, Gracey, Drewett, and Thomas (1973) discussed a range of cases of urban growth and control. The green belt was an important, and relatively new, policy; and urban containment a major (although not the sole) intention. Yet, particularly as individual transportation became easier, belts were being ‘leap-frogged’. Containment generated significant social and economic costs, with development pressure being displaced, not reduced. Nevertheless the green belt became a widely accepted planning policy, “one of the greatest tangible achievements of post-war social-democratic planning” (Edwards, 2000) and widely adopted worldwide (Ward, 2002).

However, local authorities differ in how they interpret green belt policies (Amati & Yokohari, 2006). The green belt plays a role in changing agricultural practice in designated areas (Munton, Whatmore, & Marsden, 1988) and thus, potentially, in changing the landscape. It may be more a zone of transition than conservation: “ambivalent and flexible” as Tang, Wong, and Lee (2007) say of Hong Kong.

Abbott (2002), amongst other critics, argues that the green belts actually defeat their own stated objective of saving the countryside and open spaces. If towns are prevented from expanding ‘normally and organically’ (although both concepts are debatable), there are necessarily more land-extensive housing developments further out, beyond the green belt boundaries. ‘Leap-frogging’, of necessity dependent on cars and commuting, and thus less sustainable, will continue. The Chair of Natural England, Sir Martin Doughty, argued in 2007 for a review of green belts, saying: “The time has come for a greener green belt. We need a 21st century solution to England’s housing needs which puts in place a network of green wedges, gaps and corridors, linking the natural environment and people” (Doughty, quoted in Natural England, 2007). Likewise, and based on a European study Werquin et al. (2005) have sought a reconceptualisation of green space, urban and other, articulated as “the spatial network that links open spaces, public and private gardens, public parks, sports fields, allotment gardens and recreation grounds within the city to the networks of woodlands and river floodplains in the surrounding countryside.”

This introduces the concept of ‘green infrastructure’; appropriate planning at the strategic level, of an urban area and its hinterland, could result in a more flexible approach to landscape conservation, character and use.

“Green infrastructure planning is therefore seen to be more complex, in both subject matter and process, than conventional open space planning—and potentially more effective in enhancing ‘liveability’ for human communities while nurturing the intrinsic values of the natural environment” (Kambites & Owen, 2006, p. 484).

3.4. Fragmentation at the urban edge?

Theories of ideal and SMART urban development and spread have not been realised in practice. Instead the past eight decades have been characterised by a discourse of fear and unease about what is happening at the urban edge: sprawl (Bruegmann, 2005; Duany, Plater-Zyberk, & Speck, 2000) and edge city (Garreau, 1991). Postmodern urbanism has resulted in urban (and suburban, and peri-urban) forms that directly contradict the Burgess model (Dear & Flusty, 1988). Despite the massive investment of funds, time and effort in planning activities, planning has been characterised as failing – whether specifically or at the urban edge, in the UK and elsewhere (Cullingworth, 1997; Hogan, 2003). Detailed morphological studies have revealed complex patterns of discontinuous decision making spread over decades, resulting in equally complex patterns of urban land use and land form. A careful plan (or series of plans) made in the circumstances of one period is likely to date quickly and, especially if not fully implemented, to produce unintended consequences including a loss of faith in planning, with partially implemented and abandoned schemes on the ground. Hence Hebbert’s (1998) classic study of London, including its regional planning and thus its RUF areas, is subtitled ‘more by fortune than design’.

The messy and complex spaces of the RUF are clearly problematic for plan making and plan implementation. Yet this can provide, under the right governance arrangements, important opportunities for innovation. Associated with this is the dimension of landscape change; even where policies seek to reduce or minimise change (for example through rhetorics of conservation or protection, including green belts). Yet all landscapes change. Perhaps the most powerful concept to apply to the RUF is that of ‘non-plan’ (Banham, Barker, Hall, & Price, 1969), which was favourably re-assessed at its thirtieth anniversary – itself over a decade ago (Barker, 1999; Hughes & Sadler, 2000). Rigid planning structures have helped neither the city nor the fringe, as green-belt leap-frogging shows: they often date quickly and are rarely implemented in full.
3.5. Lessons

From the urban perspective, the lessons of the RUF can be summarised as:

- Most urban perspectives have been inward-focused, producing simple models often based on land use. These are of limited use given the multi-dimensional and multi-functional character of the RUF.
- Many models assume continued outward urban expansion. ‘Sprawl’ is a major concern.
- Some conceptualise changing land uses over time, and the fate of RUF areas when absorbed by urban expansion; and patterns of lower-density development of former RUF space can still be traced decades or centuries later. This emphasises the importance of a long time perspective.
- Green belts have stopped urban expansion (for some cities) but have resulted in phenomena such as higher-density development at the urban fringe, including ‘edge cities’, and ‘leapfrogging’ the green belt. Urban-related activities such as recreation have changed the character of green belt space and use.
- More sophisticated concepts including wedges and corridors, some penetrating the built-up area, are being suggested to replace rigid and continuous green belts, and implementation of green infrastructure planning may help this.
- The RUF is a flexible strategic opportunity space, but too-rigid planning structures can reduce this flexibility.

This chapter has been focussed on the lessons of the RUF from the urban perspective; the next chapter switches emphasis to consider the lessons from a rural-centric perspective.

4. Learning the lessons 2: a historical rural–led narrative reconnecting the RUF within the countryside management approach

This chapter revisits the countryside management projects of the early 1980s in the UK. In the context of this paper they are significant as they represent a dedicated and explicit policy intervention in the RUF as part of a multifunctional strategy to deliver environmental and community benefits. Unfortunately there is a dearth of academic papers critiquing these RUF experiments, albeit with the notable exception of the work by Gallent et al. (2006) which was fuelled by research programmes of the Countryside Commission and Countryside Agency. Consequently, we are overly reliant upon a ‘grey’ policy literature and the lead author’s own reflective experiences as a pioneer in developing countryside management courses and programmes.\(^2\) The resulting narrative, however, provides salutary lessons for RUF research and practice.

The Countryside Commission\(^3\) in the late 1970s and early 1980s championed a new ‘countryside management’ approach (CMA) within which its main work programmes and funding were to be located (Bromley, 1990; Countryside Commission, 1981, 1987). CMA emerged from a series of successful pilot projects focussed on the RUF (e.g. ‘The Bollin Valley: A study of land management in the urban fringe’, 1976). Fig. 5 shows the essential components of the approach with the countryside manager positioned at the interface between the needs, impacts and policies of the visitors, residents and place. This role as mediator, negotiator and enabler was new in this setting and one based on building community capacity and skills, where process was seen as of equal importance as outcomes (Buller & Wright, 1990). Countryside project officers were financed through Countryside Commission grant aid programmes within local authorities to implement small-scale community-based projects addressing

\(^2\) The lead author was Head of Countryside Management at the Welsh Agricultural College and University of Wales Aberystwyth from 1988 to 2004.

\(^3\) The Countryside Commission, formerly the government’s adviser on landscape and recreation matters, is now subsumed within the wider non-departmental public body called Natural England.
emerging problems and opportunities as cities and towns expanded into rural spaces. Key to the success of the CMA was the role of the project officer and their interaction with local communities and key stakeholders such as farmers and landowners in identifying and addressing problems and priorities and translating these into resultant countryside strategies (Countryside Commission, 1987). This created a new profession with its attendant skills agenda, leading to many agricultural colleges and universities creating new degree and diploma programmes in Countryside Management to satisfy the growing demand (Countryside Commission, 1987; Welsh Agricultural College, 1988).

Significantly, the theory of the CMA challenged sectoral thinking within the RUF through its focus on integration, joining up different policy priorities based on the needs of the communities and environment themselves. The demand for such integrated thinking shaped a significant Countryside Agency research programme (2001–2006) illuminating the RUF opportunity space. Here, background papers provided comprehensive state-of-the-art reviews on key drivers of change in the RUF: waste, minerals, energy, recreation, green belt, transport, nature conservation, archaeology, commercial development, landscape, housing and agriculture (Countryside Agency, 2002). Subsequent policy development and grant incentives heralded a panoply of projects within the RUF, set within a re-branding and positive vision for the management of the Countryside Around Towns (CAT) (Countryside Agency and Groundwork Trust, 2004, 2005; Gallent et al., 2004, 2006). The term CAT was used here to counter perceived negativity associated with the word ‘fringe’. A range of policy recommendations was forthcoming supported by academic research (Gallent et al., 2004, 2006) with support for regional coalitions, partnerships, audits, dedicated strategies and plans. The use of exemplars and further research was seen as the key steps towards realising this vision set within ten core themes (Countryside Agency and Groundwork Trust, 2005):

- “A bridge to the country
- A gateway to the town
- A health centre
- A classroom
- A recycling and renewable energy centre
- A productive landscape
- A cultural legacy
- A place for sustainable living
- An engine for regeneration
- A nature reserve”

However, their explicit focus on experimentation and innovation was, and remains, significantly under-realised, failing to become embedded in policy; thus perpetuating the RUF/CAT as a largely forgotten space. The reasons for this are unclear and are not evident in academic literature. However, drawing on personal communications with the Countryside Agency and personal reflection as a countryside manager there were significant institutional, financial and credibility drivers at work. First, and perhaps most important, the launch of CAT coincided with the creation of Natural England involving the merger of the Countryside Agency, English Nature and parts of the Rural Development Commission within a new government Non-Departmental Public Body. This involved significant restructuring of staff with new functions and responsibilities resulting in a hiatus in existing programmes.4

Second, many countryside managers were pioneers in their field, with considerable flexibility and freedom to pursue their work with limited managerial interventions. They were located in different local authority departments across the UK (e.g. tourism, planning, recreation and environment). As these were new appointments,5 senior managers were ill-equipped to understand their work role, exacerbated by the rapid turn over of staff in these CMA positions. The influence of Countryside Commission grant aid budgets was crucial in driving appointments which provided a significant income stream to stressed local authority budgets. Mather, Hill, and Nijnik’s (2006) work on farmers’ responses to farm and forestry grant incentives is highly informative here in revealing how financial incentives may generate a shallow buy-in from participants to the underlying principles of particular schemes, meaning that they were vulnerable to any change in the economic incentives driving them. In CMA we argue this was important as, when grant aid was switched away from posts towards outputs, many countryside management projects in the RUF were phased out (see Countryside Commission, 1987).

Third, although CMA was championed as a new model working across traditional boundaries and silos with active involvement of communities and stakeholders, this was increasingly seen as parochial, bounded within interventions that had negligible impact

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4 It was significant that library copies of CAT material had been shredded as part of a re-organisation process.

5 The reason for this diversity was unclear but based on the principal author’s own experiences this had more to do with the priority of securing the grant aid in the first place and then having to meet the budgetary requirements.
on local authority statutory policies and decision making associated with planning, health, education, transport and social services. In effect this was a parallel intervention in keeping with the idea of creeping incrementalism (Curry, 1993). Thus CMA interventions were being carried out separately to the statutory work of the local authorities, resulting in CMA being an add-on to the conventional statutory functions and hence vulnerable to cutting when resources were scarce (Riding, 2011).

The overriding lesson from this experience highlights the importance of embedding new approaches into existing governance arrangements as well as securing behaviour change across the key stakeholders. It is clear that CMA was valuable for the people that were involved in, and directly affected by, projects but its influence was limited as the approach was not embedded across other local authority departments which continued working in their own silos, particularly in the delivery of statutory planning functions. Hence CMA was peripheral and ultimately vulnerable to cuts with all the loss of expertise and intelligence that entails (Scott, 2011b). This has important implications for the conduct of our research where we seek to embed more integrative thinking in order to address a systemic culture of disintegrated policy and decision making.

5. Doing transdisciplinary research: managing the ‘messiness’ of the RUF

The complexity and ‘messiness’ of the RUF outlined in the previous chapters present a significant theoretical, policy and practice challenge within which this paper is located. Our response was channelled through a grant within the RELU IV programme which promotes interdisciplinary research solutions in conjunction with policy and practice communities (Relu, 2012). A transdisciplinary research approach was adopted to facilitate the integration of both academic and non-academic perspectives within and across the RUF domain. Each perspective brings its particular ‘lens’ to the research process, but through the embedding of social learning via reflexive communication and interaction between participants as the research proceeds, the research process itself becomes part of developing the RUF solution (Glass, Scott, & Price, 2013; Reed et al., 2010; Tress et al., 2005). Using a co-production philosophy it becomes possible to combine theoretical and experiential knowledge in a deliberative manner, searching for mutually acceptable processes and outputs (Blackstock & Richards, 2007; McCrum et al., 2009). In this way, non-academics involved in the research become ‘active team participants’ rather than ‘passive contacts’; they act in an analogous manner to the researchers and all team members jointly learn and develop knowledge for solving problems (Astleithner & Hamedinger, 2003).

Consequently, a research team was assembled comprising both academic and non-academic participants as co-investigators with a simple brief to tackle the ‘disintegrated’ nature of policy and decision making in the RUF through the fusing of SP and EA frameworks. In this way interdisciplinarity was embedded into the research at the outset as recommended by Tress et al. (2005). Rather than pre-select certain organisations and agencies, a purposive approach was used securing key individuals whose work cut across the RUF boundaries and/or who were champions of SP theory and practice or the EA (Table 2).

A key criterion for selection was participant predisposition to work on complex problems outside usual comfort zones using interdisciplinary perspectives as evident in the organisations’ remits and individuals’ research and practice records. Recruitment was by letter and telephone conversation and, significantly, did not involve individuals with whom the PI had previously collaborated, with only one exception.6 The full research team is listed in Table 2 and, whilst covering a range of interests – across natural and social sciences; across economic, social and environmental sectors; across national to local scales of operation; across public, private and voluntary sectors – was rather pragmatic than being representative.

Participant deliberation was embedded into the research process and the project developed organically in response to debate and discussion amongst the team rather than through fixed stages and pre-determined pathways. In this way social learning was maximised which in itself was a key requirement for the research (Shortall, 2008). Deliberation via meetings, conference calls and Microsoft Sharepoint provided the platforms for building mutual understanding and debate among the participants, allowing the joint development and endorsement of outputs and action strategies. Significantly, these mechanisms did not always work effectively thus promoting changes in direction through

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6 This was more accidental than deliberate. However the PI had just started a new post and had not worked with any member of the team before except one person from a previous job role. The bringing together of such a diverse group across the UK heralded new insights that may have been restricted by working exclusively or predominantly with past research collaborators.
group social learning, allowing a step to be taken beyond interaction between groups to facilitate learning within groups to maximise progress within limited resources (Glass et al., 2013; McCrum et al., 2009; Reed et al., 2010).

Table 2
The research team.

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
<th>Role within the project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alister Scott</td>
<td>Birmingham City University (BCU)</td>
<td>Principal investigator</td>
</tr>
<tr>
<td>Ben Stonyer</td>
<td>BCU (seconded from David Jarvis Associates)</td>
<td>Research officer</td>
</tr>
<tr>
<td>Rachel Curzon</td>
<td>BCU</td>
<td>Co-investigator</td>
</tr>
<tr>
<td>Claudia Carter</td>
<td>BCU (initially Forest Research; from 2011 job change to BCU)</td>
<td>Co-investigator</td>
</tr>
<tr>
<td>Nicki Schiessel</td>
<td>BCU</td>
<td>Co-investigator</td>
</tr>
<tr>
<td>Nick Morton</td>
<td>BCU</td>
<td>Co-investigator</td>
</tr>
<tr>
<td>Peter Larkham</td>
<td>BCU</td>
<td>Co-investigator</td>
</tr>
<tr>
<td>Mark Reed</td>
<td>University of Aberdeen (from 2011 BCU)</td>
<td>Co-investigator</td>
</tr>
<tr>
<td>Bob Forster</td>
<td>West Midlands Rural Affairs Forum</td>
<td>Co-investigator</td>
</tr>
<tr>
<td>David Collier</td>
<td>National Farmers Union</td>
<td>Co-investigator</td>
</tr>
<tr>
<td>David Jarvis/Paul Gibbs</td>
<td>Forest Research; from 2011 job change to BCU</td>
<td>Co-investigator</td>
</tr>
<tr>
<td>Keith Budden (2010, then changed job/organisation)</td>
<td>Birmingham Environmental Partnership</td>
<td>Co-investigator</td>
</tr>
<tr>
<td>Nick Grayson (from 2011)</td>
<td>Birmingham Environmental Partnership</td>
<td>Co-investigator</td>
</tr>
<tr>
<td>Karen Leach/Chris Crean</td>
<td>Localise West Midlands</td>
<td>Co-investigator</td>
</tr>
<tr>
<td>Mark Middleton</td>
<td>West Midlands Regional Assembly</td>
<td>Co-investigator</td>
</tr>
<tr>
<td>(Worcestershire County Council)</td>
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<tr>
<td>Miriam Kennet</td>
<td>Green Economics Institute</td>
<td>Co-investigator</td>
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<td>Ruth Waters</td>
<td>Natural England</td>
<td>Co-investigator</td>
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<tr>
<td>Andrew Hearle Hayley Pankhurst</td>
<td>Natural England</td>
<td>Co-investigator</td>
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Through active collaboration transcending normal boundaries this eclectic research team had environmental, planning, academic and policy credibility and experience embedded in the research from the outset; something that is rare in contemporary research.
approaches. Furthermore, through a deliberately fuzzy research process the actual research journey became a critical part of the research process in collectively unpacking and deciding the trajectory through the art of doing, learning and reflecting (Astleithner & Hamdinger, 2003; McCrum et al., 2009). Fig. 6 diagrammatically charts the stages, outputs and activities in the research which evolved from these deliberations.

The project involved several iterative phases. First, members of the team produced their own separate reflective ‘thoughtpieces’ based on their expertise and experiences on either SP and/or EA. These were then integrated within conventional literature reviews and state of knowledge assessments as internal working papers. The PI then synthesised all the individual ‘thoughtpieces’ into one coherent document outlining options for the fusion of SP and EA frameworks. The subsequent deliberations and discussions identified and reinforced synergies between the two approaches with eventually three ‘bridging’ concepts selected that best captured core principles from both approaches; Connections, Time and Values. Crucially, these ‘simple’, though conceptually-rich terms were seen as powerful in translating abstract ideas from SP and EA into more accessible and intelligible language to aid both decision-makers and wider publics (Fig. 7).

Having agreed these concepts, we then unpacked them within the RUF arena through our primary research activities. First, using the networks of selected research team members, we held nine themed workshops involving over 250 participants (Table 3). The themes were identified collaboratively with one of the team members leading and adapting the theme(s), as appropriate, reflecting the expertise and motivations of their organisation and/or networks. This maximised turnout and lively discussions which were captured in a variety of paper and recorded outputs. A summary report was produced and circulated to participants with further questions added to allow one further round of deliberation via e-mail. This extra phase was seen as useful in allowing some critical reflection (e.g. Table 4) as recommended by Glass et al. (2013).

The second method involved field-based visioning exercises within two case studies of the RUF, adapting a method pioneered by Scott et al. (2009) for the Welsh Assembly Government. The case studies were carefully selected to reflect different scales and foci of the RUF, as well as research team expertise and experience. The first case study was in Hampton (an urban extension of Peterborough), a mixed housing and employment development of 7000 new homes and 12,000 new jobs, forming part of a sustainable urban extension onto brownfield land (a former brickworks site). The master plan for this development was produced in 1991 and all stages of design and implementation have been delivered by one of our research team members (Fig. 8).

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7 All working papers are on the MECRUF sharepoint system which provides capture of all data in this research. Papers are available on request although they were written as internal documents only.
Table 3

<table>
<thead>
<tr>
<th>Workshop theme</th>
<th>Host</th>
<th>Number of participants</th>
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</thead>
<tbody>
<tr>
<td>Improving decision-making for the sustainable</td>
<td>West Midlands Rural Affairs Forum</td>
<td>25</td>
</tr>
<tr>
<td>management of the rural–urban fringe</td>
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<tr>
<td>Long termism/values in the built environment:</td>
<td>Green Economics Institute</td>
<td>65</td>
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<tr>
<td>rural–urban fringe and land use</td>
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<tr>
<td>Bridging the rural–urban divide through</td>
<td>Birmingham Environmental Partnership</td>
<td>88</td>
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<tr>
<td>green economic opportunities</td>
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<tr>
<td>Local needs with local resources in the</td>
<td>Localise West Midlands</td>
<td>15</td>
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<tr>
<td>rural–urban fringe</td>
<td></td>
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<tr>
<td>Leaning the lessons from strategic planning:</td>
<td>Birmingham City University</td>
<td>14</td>
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<tr>
<td>resurrecting institutional memories</td>
<td></td>
<td></td>
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<tr>
<td>Values and decision-making</td>
<td>Forest Research</td>
<td>8</td>
</tr>
<tr>
<td>Sustainable urban futures</td>
<td>Birmingham Institute of Art and Design</td>
<td>12</td>
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<tr>
<td>Climate change and the 9-piece jigsaw</td>
<td>Birmingham City Council</td>
<td>8</td>
</tr>
<tr>
<td>Rufopoly</td>
<td>Birmingham City University</td>
<td>11</td>
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</tbody>
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The second case was situated across North Worcestershire with a landscape-scale rural fringe focus. This area lay within the jurisdiction of five members of our research team and was also subject to an innovative green infrastructure project directly involving one agency in our research team (Fig. 9).

In both cases the visioning approach sought professional and public perceptions of RUF spaces through group discussion. The Connections, Values,

Table 4
Personal lessons from regional planners (taken verbatim from hand written post-it notes used in the workshop).

- Ensure top level corporate buy-in
- Stand up to government central imposition of targets
- Regional institutions are weakened when they engage in issues which lack a clear regional dimension
- Management of the politics of regional bodies is very undeveloped
- Be prepared to react more proactively to perceived challenges to what works
- Value of consensual approach
- The need to develop effective partnerships
- The need to incorporated a wide range of knowledge about other related areas to my core experience
- The value of having a long term overarching view
- The importance of personal networks that go beyond institutions to carrying connections forward
- Strategy good; implementation poor
- Implementation needed stronger clearer downward engagement
- Needed clearer legitimisation and ownership by local authorities
- Clearer and closer relationships between planning and strategic housing and housing related aspects of economic development and health; i.e. better integration
- Experience in the wider context and its relationships with neighbours
- Partnership working and integrated approaches; Building common agendas through joint understanding of challenges BUT all this needs to be managed through a structured approach

Time framework was presented to them as a lens within which their discussions might proceed, and we used the simple but powerful visual prompt of the real landscape to manage the discussion, drawing on reactions to the landscape as perceived, how it has changed and their desired visions for the future.

Participants were involved in a pre-planned trip across the RUF involving three formal viewpoints; a pragmatic number based on time available in the field situation. The participants were selected via a purposive sample of business, community, environment and economic interests whilst the three viewpoints were selected using the concept of a transect.8 Here a zone/area of interest moving out from within an urban edge to a rural hinterland was identified. However, rather than the team identifying the transect ourselves, we utilised local expertise to define it based on a brief to maximise RUF diversity. From the resulting intelligence, specific viewpoints were then identified by the research team with respect to health and safety, access and view line.

In Worcestershire we were able to use emerging outputs from the Worcestershire Green Infrastructure Partnership (2011) which, through the assimilation of environmental and landscape datasets, had created a composite map of environmental character areas. This was used to define three areas which maximised different environmental characters (Fig. 10).

In Hampton we relied on the master plan consultants and landowner who, having some 20 years of

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8 The RUF transect suggestion came from a meeting of Defra and DCLG officials as part of the PI’s RELU work shadowing scheme and discussions across other public bodies and government departments.
experience as developers of the site, used their expertise and familiarity to identify a suitable transect across the development site, picking three viewpoints that also maximised the different character (Fig. 11).

The visioning exercises took place on the 18th (Hampton: 11 participants) and 19th (Worcestershire: 16 participants) July 2011 from 12.30 to 17:00; a half-day format was chosen to secure the maximum number of respondents. The format for the afternoon was replicated across the two areas with the hiring of a function room as a base; lunch, involving a project briefing, a summary planning and environment policy overview; a minibus drive to viewpoints; facilitated and recorded discussions within smaller groups at each viewpoint; self-recorded participant comments using a notepad to capture key points whether or not they were voiced in discussion; a cream tea and debrief on return. All this material informed a summary report which was emailed to participants with one final request for feedback and post-visit thoughts via email.

The discussions were managed by facilitators from the project team/coordinator’s organisation within smaller sub-groups (4–5 persons) to maximise the quality of discussion data and give each person the chance to participate. Significantly, we also employed a ‘floating’ facilitator who worked across the groups listening to discussions, parachuting ideas from one group to the next, where appropriate. At each viewpoint there was a focus on unpacking the RUF using the different lenses of the past, present and future. Here, participants were able to draw upon their experiences and expertise to present critical observations on both processes and outcomes of RUF change. Particular emphasis was placed on the how the RUF might evolve given the uncertainties of environmental change.

The workshops and visioning tours formed the core evidence base from which the nature of policy and decision making in the RUF was unpacked through both personal and group narratives. Collectively, they help identify actions and interventions that can help cross the built and natural environment divide and thus improve RUF planning and management. Within the context of our project methodology we achieved these through two complementary outputs: Video policy briefs and

![Fig. 8. The Hampton case study area.](image-url)
Fig. 9. The North Worcestershire case study area.

Fig. 10. Worcester transect – photographs of viewpoints.
Rufopoly. These go beyond traditional research outputs towards performativity in keeping with the wider goals of the research involving reflective learning and the desire to go beyond existing boundaries and comfort zones.

First, five video policy briefs\(^9\) provided a novel platform within which to communicate our findings from the project involving all the team in their design, production and delivery. There has been widespread dissemination across academia, policy and practice. The title of each 15–18 min video conveys the need for action which collectively provides our RUF agenda – **Re-discovering** the RUF; **Reconnecting** the built and natural environment divide in the rural–urban fringe; **Understanding connections** by **crossing boundaries** in the RUF; **Managing** contested values in the RUF; and **Adapting** for the long-term in the rural–urban fringe (Carter et al., 2012; Schiessel et al., 2012; Scott et al., 2012a,b; Scott, Carter, Waters, et al., 2012).

The second output was the learning tool Rufopoly\(^10\) which was developed to enable a range of different publics to engage directly with our conceptual framework and primary data in the form of a fun learning environment (Fig. 12). Participants make their own journey within a hypothetical RUF (RUFshire) with a facilitator who records their responses to questions determined by the random throw of a dice. The questions relate to our primary data evidence, adapted from workshop and visioning responses, and filtered into the conceptual framework that binds the project together. The board is colour coded into questions on Time, Connections and Values with a further category on SP and EA conceptual issues. At the end of the journey, participants are required to create a vision for RUFshire based on the string of decisions/justifications

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made previously using the recorded notes captured by the facilitator. This brings an active learning dimension into this output that goes far beyond the simple written or video policy brief, and starts to engage the participant in justifying and being held accountable for their own ideas and beliefs. The game has been played by a range of key stakeholders including Welsh Government, County and District Councillors, Students, Rural Experts, Local Enterprise Partnerships, Interreg (SURF) project on rural–urban fringe, Professional bodies (RTPI); Research Councils (LWEC) and publics. Furthermore, a dedicated workshop was held in May 2012 involving Scottish, Welsh and English representatives across the built and natural environment professions to evaluate its effectiveness as a decision making tool. Responses to all the games have been analysed into group reports as part of a comprehensive feedback process as the tool has developed.

The following chapter now illuminates the results from the phases of the method. The use of narratives provide powerful insights into the theory and practice across the RUF, SP and EA with regard to the
disintegration of policy making clearly in evidence but this is also counterbalanced by examples of good practice that signal ways forward.

6. Results: telling stories about the RUF

This section uses the core data emerging from the research within a series of narratives. First, the disintegrated nature of the built and natural environment is revealed through an exposition of SP and EA theory and policy, drawing on the synthesis of team-member thoughtpieces. Second, drawing on the results of the visioning and workshop phases, the diverse nature of policy disintegration is revealed in daily practice. Finally, attention is focussed on good practice and approaches emerging from the visioning and workshop results that help reconnect and cross the built and natural environment divide. This shapes the final discussion chapter where we consider how we might strengthen the conceptual theory for SP and EA outside traditional disciplinary silos.

6.1. Storyline 1: disintegrated theories between the natural and built environment

It is salient to reflect that much of the evolution of SP and EA theory, policies and tools has occurred in isolated silos without benefitting from a truly interdisciplinary perspective linking SP and EA. Consequently, the problems experienced have not had the benefit of joined-up or integrated discussions with planners, economists and ecologists working collectively on joint solutions. The resultant divide has created not only a policy disjuncture but also equally a theoretical one, with important implications for the disintegrated way policy is developed.

Thus SP has been the preserve of planning academics across Europe with only limited success in embedding this thinking within wider planning practice (Tewdwr-Jones et al., 2010) and a real failure in securing buy-in from other professions or disciplines (Scott, 2010a; Taylor, 2010). From the team thoughtpieces it is clear that there remains significant dissatisfaction with the way the theory of spatial planning has failed to be realised in practice.

Kennet (2010) argues that planning and planners are still located in its previous land use and developer-led roots: “Planning led by commercial building interests has led to the lack of local community amenities in most modern development . . .”. “Planning, policies and especially politics still focus much on economic development”, with planners reluctant to “move from the strict land-use/transportation approach”.

Carter (2010) agrees and suggests that integration has proved something of an illusion given its legal fix: “Existing rules and regulations (planning law and international agreements) tend to have specific (sectoral) objectives, and lack enabling structures or core principles to practice sustainable development”.

Undoubtedly, the EA has secured greater traction within the environmental disciplines and professions incorporating ecology, economics and political perspectives. Nevertheless, it also remains beset by operational problems. For example, Waters (2010) acknowledges in her own job role:

“. . .to people on the street, farmers, land managers, planners and many decision makers the ecosystem approach is surrounded in a complex mix of difficult terms and academic language, difficult to understand and visualise what this means on the ground”.

Furthermore, the overuse and abuse of ecosystem services as a tangible expression of the EA has led Carter (2010) to warn that the “valuation of environmental goods and services is controversial in terms of how to do it meaningfully and . . . the dangers of commodifying nature/ecosystems.”

Reed et al. (2013) and Jarvis (2010) highlight the problems of trade-offs and weighting set within the multiscalar and sectoral complexity of RUF conflicts:

“burning management for ground-nesting birds at different spatial scales and over different burning rotations favours different species. While localised burning may favour one group of species, large-scale burning may favour other groups at the expense of those favoured by small-scale burning” (Reed et al., 2013).

“What they all fail to deal with adequately is the question of weighting – is the local occurrence of a beetle more important than the view across to a church?” (Jarvis, 2010, p. 2)

Whilst both SP and EA have operational problems and dilemmas, the most significant component of this narrative is the way that the theory drives the institutional divide which, in the UK context is reflected in separate governance arrangements and institutional architectures; the EA falls squarely under the preserve of the Department of Environment, Food and Rural Affairs (Defra) whilst SP is under the remit of the Department of Communities and Local Government (DCLG). The resulting strategies and work programmes tend to embed ‘disintegration’ into policy interventions as exemplified in Fig. 2.
Kennet (2010) highlights this disintegration operating at a global scale in magnifying the current economic difficulties:

“Such projects were driven by the profit motive of the construction company rather than the need for the particular project in the host country, for example large dam projects in Ethiopia and China which have led to thousands if not millions of people actually being displaced and losing their homes. So construction and the built environment can be seen as a leading player in the contemporary economic downturn”.

This separation can also exacerbate problems at the RUF which lacks a sufficiently strategic approach:

“The fundamental problem at the rural/urban divide is that change does not happen gently and, soon, needs to change again and again as the city expands. If effort is placed into creating a beautiful urban edge where it adjoins fields, what happens when the city expands? A new urban edge façade is created further out, while the previous urban edge now needs to perform different functions and may sit awkwardly within the enlarged city. As the expansion continues, intensification of usage may cause additional dilemmas stemming from the original design as a city edge. The reserve is happening to the rural landscape where the fabric and operational configuration is consistently destroyed or deformed.” (Jarvis, 2010)

Consequently, the danger with SP and EA approaches is that, whilst they both reflect the importance of the environment through the various tools they use, they construct and value the various constituents of the built and natural environment differently; SP through zoning and plans (e.g. Qviström, 2007) and EA from the concepts of goods and services provided by nature (e.g. Reed, Dougill, & Baker, 2008). Furthermore, both approaches may neglect important components of cultural influence, social and environmental justice which are important goals of public policy. (Scott, 2010b)

However, despite these critiques, both the SP and EA have embedded very similar core principles that are appropriate, if not essential, for decision making in an era of rapid (not just environmental) change. Drawing on the synthesis document the following principles transcend both approaches (Scott, 2010b, p. 6–7):

• “SP and EA represent a fundamental culture change in the work and modus operandi of planning and managing land use;
• SP and EA stress the importance of responding to environmental change across multiple temporal scales (short-term to decadal) and across multiple scalar perspectives (global–European–national–regional–local–neighbourhood);
• SP and EA highlight fundamental principles of integration, co-management, partnership, governance and inclusion;
• SP and EA champion multi-inter- and trans-disciplinary perspectives; in particular, crossing urban and rural boundaries and sectors;
• SP and EA recognise the value of social learning and drawing upon different types of knowledge within an imperfect and unpredictable decision making environment;
• SP and EA stress the need for a solid yet proportionate evidence base from which decisions and policies should be made;
• SP and EA recognise the importance of new forms of environmental governance with the need for partnerships with greater community and stakeholder involvement; and
• SP and EA recognise the need to consider alternative futures as integral parts of plan making processes.”

Equally, both approaches also share similarities surrounding their definitional and operational deficiencies. Specifically both:

• “suffer from a lack of definitional clarity, with significant problems over their operationalisation within policy communities and different public(s);
• are used uncritically in research and policy literatures and discussions which obfuscates their correct understanding and application;
• involve complex vocabulary and language which is open to manipulation and ‘greenwash’;
• remain overly reliant on economic models and imperatives;
• overlook issues of social and environmental justice; and
• stress integration and interdisciplinarity in theory but remain beset by sectoral approaches in practice”.

The research team, therefore, collectively sifted out from these areas of convergence three cross-cutting core themes, Connections, Time and Values, which comprised our conceptual framework to apply in the subsequent workshops and visioning exercises (Fig. 7). These terms are seen as more readily understandable in public discourse than EA and SP, and were applied as the project ‘lens’ through which the research team and
partners were able to undertake their journey through the RUF.

6.2. Storyline 2: disintegrated policy and decisions in the RUF

Four examples are presented here to provide a flavour of the different contexts within which this “disintegration” is played out. The starting position is to acknowledge that the RUF itself as a forgotten space provides a perfect arena within which a host of disjointed policies and decisions proliferate, as rarely was the RUF considered as a space or place in its own right:

“Many agencies did not have a particular view on the fringe space except when it was part of an actual project ... Although some pieces of work and evidence were commissioned, they only addressed particular features of the fringe landscape”. (Workshop: BCU)

This is exacerbated by the silo mentality in evidence which means that decisions are made within a particular ‘lens’ view; the prevailing orthodoxy of securing economic growth outcomes seemingly taking precedence.

“We need joined up approaches but the key is economic growth and prosperity. We don’t want to be deflected by environmental concerns”. (Workshop: BEP)

(i) Whose authority?
The universal planning problem of cross-boundary co-operation between different local authorities reflects competing tensions over growth and conservation priorities which are now regularly played out across many areas of RUF space across the UK and globally. At the heart of this narrative lies the artificial placement of administrative boundaries which then shape particular planning and management responses. In our research this was revealed by the case between the housing needs of Redditch Borough Council and the green belt of neighbouring Bromsgrove District Council within the RUF. Redditch had reached a population of 78,000 and is at the limit of its boundaries to the west and east. However, in order to meet identified future

housing need Redditch Borough Council encounters the green belt policies of Bromsgrove District Council. Crucially, the governance arrangements to reconcile this dilemma have recently changed. Under the previous government the regional tier of government was discharged through the West Midlands Regional Assembly via the development of a Regional Spatial Strategy (RSS). The RSS forms part of the statutory development plan and therefore required formal approvals and public consultation processes. The plan covering Redditch and Bromsgrove had gone to public inquiry and had a panel report but had not been finalised and approved, so was only a material consideration in planning terms. Within this proposed RSS there had been a requirement for Bromsgrove District to accommodate some of Redditch’s growth through extensions into the green belt as a solution within the wider spatial planning context of the needs of Greater Birmingham and the West Midlands as a whole. However, the current coalition government (2010) abolished the RSS within the new rhetoric of localism and a planning system rooted in the ideas of local people. The resultant effect was that Bromsgrove rejected the original housing allocations in favour of maintaining the existing green belt protection. It is not fair or appropriate to pass judgement or comment on the merits of this particular case; rather it is used to highlight how changing governance and administrative boundaries have further disintegrated the framework within which planning solutions are being made. The loss of the statutory requirement to consider the wider regional needs of the West Midlands as a whole has been replaced and watered down with a ‘duty to co-operate’, which lacks clear guidance. This shift from regionalism to localism distorts connections across the RUF as local authorities focus primarily on their internal needs which have a strong local political component. The current disjuncture therefore remains a political power play with the outcome uncertain.

12 Since the time of undertaking the research Bromsgrove and Redditch Councils have implemented a shared planning service to improve their strategic planning. This has culminated in a housing growth development study with major new housing and infrastructure proposed in two green belt extensions of Bromsgrove which is feeding into the emerging local plan. http://www.redditchbc.gov.uk/KeyDocuments/PDF/HG%20development%20study%20latest%20low%20res%2031-03-13%20(2).pdf accessed 13 May 2013. In many ways this addresses the concerns expressed in the narrative and reflects and interesting change in governance in joint delivery of planning services. However, the universal issue of public opposition to new housing in green belt extensions threatens to undermine the more strategic approach in evidence.
(ii) Protect nature – exclude the public

The second narrative comes from the Hampton visioning exercise where the development of the former brickworks site revealed 50,000 great crested newts across the site and, as part of the masterplan agreed with English Nature (now Natural England), a nature reserve was created which secured EU Special Area of Conservation status under NATURA 2000.¹³ The outcomes of this process and the way they have affected this development have created a significant developer and community versus environment conflict.

The presence of so many newts (a protected species) on the site clearly imposed significant constraints on development options as well as further administrative procedures for the developer to manage:

“Well the developer saw it as a restriction as lots and lots of work had to be delayed for years and years and years. See a great crested newt and everything stops. EN comes in and everything and say you can’t do anything”. (Hampton Visioning: Viewpoint 2)

For some participants, however, this environmental attraction was seen as a community asset which had real potential to instil community pride and give a sense of place:

“However, yes, it’s a fantastic nature reserve”. [All agree strongly] (Hampton Visioning: Viewpoint 3)

Nevertheless, the presence of a reserve adjoining such a large housing development posed a particular problem for managing people and wildlife. The eventual management response was to construct a fence round the perimeter, restricting public access to permit only and to stop pet cats and dogs disturbing the newts. This effectively disconnected the environmental space from the housing development and the local community. The exclusion of protected green space from the wider green infrastructure in the development was seen by visioning participants as a missed opportunity for understanding the unique value of the reserve and building community pride and place identity within the Hampton RUF. Fundamental questions were asked about how you deal with this kind of conflict:

“It’s a massive fence and people don’t like it ‘cos it’s all fenced off people can’t get to it”’. (Hampton Visioning: Viewpoint 2)

“But the problem is that the housing development has moved too close to the reserve and you then have that conflict; there is no buffer zone. Meaning that there is no greenspace people can make use of – so they don’t feel excluded”. (Hampton Visioning: Viewpoint 3)

“I think [they] should have some arranged access on some routes such as a boardwalk to take you through away from the sensitive areas”. (Hampton Visioning: Viewpoint 2)

...no information about the site to tell you what’s there. There is nothing much there. Looks like a natural wood that you can’t get in. (Hampton Visioning: Viewpoint 2)

This narrative captures the separate silo thinking that treats nature conservation values as absolute and allows development solely on the understanding that people and their pets are excluded. This runs counter to clear evidence that wider community involvement and inclusion in protected spaces will foster improved understanding and pride, thereby helping to secure improved nature conservation outcomes through regular volunteers on the ground (Evans & Birchenough, 2001; Slee et al., 2007). The current situation fosters resentment and alienation, as air rifle pellet damage to keep out signs and other vandalism starkly demonstrate. Whilst there is a much wider network of green infrastructure within the development as a whole, the current exclusion is disengaging the new community from perhaps its most valuable environmental asset.

(iii) Who gains and who loses?

The acts of planning and management inherently create winners and losers. The distributional and spatial impacts of development interventions provide important narratives and serve to highlight the often unintended consequences of decisions made within one particular mindset. Using the example of Hampton we focus on the Section 106 planning agreement. This is a planning tool used to deliver wider community infrastructure which will benefit local people as a direct result of the development. In this example there were developer undertakings to provide schools, social spaces and community infrastructure. However, these community developments were triggered by the number of actual housing completions, meaning that, as houses were built first, some vital community services were lacking which affected the new com-

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¹³ In May 1992, the governments of the European Communities adopted legislation designed to protect the most seriously threatened habitats and species across Europe. This legislation is called the Habitats Directive and complements the Birds Directive adopted in 1979. These two directives are the basis of the creation of the Natura 2000 network of protected areas.
munity’s ability to function effectively. Any slow-down in house building meant further delays, although of course this benefited the developer. This disconnect has led to conflict and tensions over community governance in Hampton, as the following extracts at Viewpoint 2 indicate.

“[…] it is an advantage [for the developer] that you have to have a certain number of houses built before things get done [under the section 106] but for the rest of the community this is a disadvantage [others agree] as we have been waiting for phase 2 for the college to be built […] but there aren’t 4000 houses yet so [the developer says] we don’t have to pay for it”.

“[…] there isn’t a community facility. The only community facility is a little building that is connected to the school. That’s the community room; we have one community room for all the 6500 people […] one community room that can hold 30 people”. [The school] was built with an outdoor amphitheatre, with expensive statues costing around, I think £50,000? [Seeks clarification from group] It was supposed to be the hub for the community; but you can’t book a room in there. You just can’t get in there”. “[…] If you want to do something in Hampton, you have to go outside Hampton to do it and that’s a problem. That is not helping sustainable communities”.

“[…] This is really embarrassing; there was a theatre society set up but it has to go outside Hampton to watch a play”. (Hampton Visioning: Viewpoint 2)

Such delays, and the changing economic climate, run the risk of re-negotiations of approved plans and continuing growth within the community without the necessary infrastructure, which threatens its viability and resilience. Indeed, within Hampton, underestimates of the number of families that would occupy the houses have placed huge pressures on the schools. This has given rise to the perverse situation of residents taking children to primary schools outside Hampton by taxi as there is neither capacity left in Hampton nor appropriate public transport.

“Planners didn’t see the problems of how many kids we would have and not enough school places. Planners didn’t see that vision of where Hampton was going in such a short time”. (Hampton Visioning: Viewpoint 2)

The narrative reveals how disintegrated planning has had profound effects on community sense of place and access to resources, thus creating significant dissatisfaction. Yet, within a positive framing, the Hampton development is widely promoted as an exemplar of green infrastructure planning within Natural England’s (2009) own guidance.

(iv) Belting up: does the one-size-fits-all approach work?

The final narrative is informed from both visioning sites in Hampton and North Worcestershire and several workshops. Here the green belt attracted critical comment from all these different contexts set within the prevailing view that, in its present form within the planning regime, it acted as both an unwelcome brake on community-oriented/beneficial development opportunities and as an indirect vehicle of social engineering:

“…green belt just protects now very affluent commuter belt settlements. This culture of negativity and restriction restricts freedom of manoeuvre for planners and the development industry”. (Workshop: West Midlands Rural Affairs Forum)

“Seems to be a local authority that has restricted itself by greenbelt designation in how we can develop and build”. (Worcestershire Visioning, Viewpoint 1)

“…develop along our linear routes and have corridors of development reflecting a more sustainable finger approach”. (Worcestershire Visioning: Viewpoint 3)

“I would like to see a county park here; that’s if you could get round the planning and finance”. (Worcestershire Visioning: Viewpoint 2)

Whilst the above quotes were set in different spatial contexts the common element was the rigid presumption against development. In such respects respondents were talking about the detailed local picture within which particular needs might manifest themselves (e.g. in terms of small business units or local housing need); or indeed within a bigger picture where, again, the wider pattern of regional needs might manifest itself (e.g. avoiding leapfrogging and accommodating development where most needed); both in direct contradiction of the green belt zoning. Support for this view was encountered across the different areas of our research.

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14 Interestingly though, unlike the more critical and differentiating responses by workshop and visioning participants, many RU/fopoly players took a broad-brush protective and conservative view of the greenbelt (i.e. adopting it as a blanket one-size-fits-all rule).
and this does suggest the need for a wider debate about the green belt zoning process. Indeed, several participants stated that too many situations exist where it runs counter to the ethos of sustainability itself and hence they desired more flexible and positive mechanisms that provided guiding principles where positive environmental and social outcomes are made more explicit, rather than inflexible blanket rules.

6.3. Storyline 3: reconnecting the RUF

(i) Learning the lessons from the past

When we talk about the long term we are looking into the future, but the question of ‘how long’ is rarely asked or considered. The Green Economics workshop, dedicated to long-termism, provides some valuable context here, highlighting the inherent tension between current short-term decision making systems and long-term challenges where looking back is of equal importance as looking forward:

“In biology terms the long term is around a million years; in geological time that would be the short term; 10,000 years for a rain forest. So why can’t we employ such time scales for the management of the built environment. At present all our plans and policies are too short term. We could plan for 50 years’ time but important when thinking about long-termism to think 50 years back as well as 50 years forward. However our systems are rooted in short-termism.” (Workshop: Green Economics)

At the heart of this lies the importance of co-producing shared visions of future development trajectory:

“What about Ebenezer Howard and his visions, these were long term; we don’t have this kind of thinking any more . . . Why?” (Workshop: BCU).

Yet, within contemporary planning policy, there appears to be a reluctance to embrace the visionary aspects of planning: there seems to be a tendency to throw the ‘baby out with the bathwater’. For example, the recent abolition of the Regional Spatial Strategies in England has resulted in many experienced regional planners retiring or moving elsewhere; losing, at a stroke, institutional and individual capital in dealing effectively with strategic spatial planning problems:

“A lot of good information can be got from looking at the past and using that; we tend to overlook this. Learning from our historical knowledge and experience is important . . . yet we tend to make the same mistakes.” (Workshop: BCU)

A particularly strong regional identity emerged from the discussions for the West Midlands, crucially before regional guidance was a statutory requirement. The key lesson was that whilst the names and organisations can and should change, the sudden loss of human expertise and their associated networks can create a vacuum of uncertainty, resulting in short-term decision making thereby threatening wider policy goals such as sustainability (Table 4). Indeed, the failure to learn from the past is a major theme emerging from this research; for example the work on the RUF commissioned by the Countryside Agency (now Natural England) between 2000 and 2006 is not available in their libraries and was only “found” accidentally as a key employee kept her own paper copies. Moreover, as we connect with many other agencies doing research on the RUF across the UK and Europe, we are beginning to learn that people are often operating in their own little enclaves, rarely communicating and sharing experiences.

“[Referring to regional planning and the Regional Spatial Strategy] For the West Midlands region it was an integrated approach; that was the whole point. Going back to the rural–urban fringe you have got the tension, the interrelationships between ecological and environmental systems and meeting needs of region . . . There was a framework and we could handle that. We looked at choices; it has been structured; people were involved in it and there was a common understanding of how it had evolved. There is now a danger that all this is now slowly going to dissipate and disappear”. (Workshop: BCU)

The workshop captured each individual’s personal lessons of these shared memories. These written stick-it notes are captured in Table 4. Collectively these notes provide a very powerful set of lessons from which basic principles and ingredients can be identified. At the heart of this lies the importance of ownership and buy-in from key stakeholders in any plan or strategy. Hence any imposition can be seen as a threat. This is also the case where an agency pursues its own agenda in isolation without reference to the contemporary governance arrangements. This then endorses the idea of building consensus set within partnerships that have real traction within an area. Whilst these findings are not new in themselves they do offer useful reflective insight from the key participants in regional planning that has been overlooked in the pursuit of a localist agenda. Principal amongst these was the way implementation of policy was “messy” and complex and not always thought through in terms of its wider perception by the public.
and decision makers. The act of doing planning was perceived as top-down and imposed, even though the strategy itself did have wider buy-in. In such aspects the integration and connectivity goals within the strategy were not being met on the ground in terms of delivery. This strategy-implementation gap has also been observed in different contexts within Wales (Scott et al., 2010).

(ii) Culture and behaviour change

Within the literature on SP and EA there was recognition that both paradigms require a change in culture in order to realise their true potential. However, achieving such change is rare in national, regional or local contexts. Looking across our primary data there is evidence that supports the need for a change in culture but highlighting the need for preliminary interventions in terms of support and capacity building. This is important as the recognition that there is a problem is often the crucial first step leading to designing interventions to deal with it.

“[Sustainability] is about responding positively to changing circumstances and, in so doing, using change to best advantage. The current economic and environmental agendas require us all to think and act differently in the way we make strategy, policy and decisions…”” .. “The creation of Local Enterprise Partnerships offers a new opportunity space to think differently about development in our urban and rural spaces. However, to do that we need to have new glasses to start viewing the potential today within the Greater Birmingham LEP in a different way, responding positively to new opportunity spaces””. (Workshop: Birmingham Environment Partnership)

“Strong partnerships are essential to long term planning. However, engaging people is far more than consulting. If people think they are being consulted, they are going to give up; it is actually worse than being ignored. They have to know it is meaningful and they will have some say. It is important to engage people to think about futures beyond their immediate interests to help them go through a step change in thinking. Here we need to take historical knowledge and experiences and science into consideration”. (Workshop: Green Economics)

“How can we bring about a cultural shift to get away from taking it for granted that population and consumption per capita will continue to grow””. (Workshop: Birmingham Environment Partnership).

“. . .the perception in policy-relevant research circles is that there is a demand for economic values disproportionate to their actual usefulness; other measures may be more meaningful. The Treasury would still view financial/economic values above others?” (Workshop: Forest Research).

The above extracts challenge the prevailing models of decision making that favour economic models and assessments set within a one-dimensional ethic; whether it is a fixation on growth or environmental protection. At the heart of this lies the need for a more inclusive and meaningful dialogue with the public as stakeholders in the process, concomitant with better engagement tools to maximise the effectiveness of their involvement set within a wider appreciation of the implications of particular views taken. It is here that skills and capacity building are required both for existing decision-makers and publics.

“. . .for better skills training and capacity building amongst policy and decision makers at all levels...not just the public”. (Workshop: West Midlands Rural Affairs Forum)

(iii) Securing multifunctionality

Building from this recognition of culture change there is a powerful narrative across our data relating to multifunctionality. In these respects Hampton provides a useful lesson of master planning incorporating a 25-year vision developed in 1991 of how a large-scale urban extension on a brownfield site (former brickworks) can make best use of green, blue and grey infrastructure within a large mixed development maximising environmental, social and economic benefits. The landowner reflected positively on the advantages of taking a long-term and inclusive approach to the development, albeit with flexibility built in. Set within four agreed principles of boldness, structure, quality of life and identity, the subsequent development is now seen as an exemplar of sustainable development (Natural England, 2009) (Fig. 13).

“Timing of the development is key; a 20-year plus programme is important in this development. . . . The way the [development] was done with planning applications and area development briefs underneath . . . has allowed us to take edible chunks of the development as we progressed. . . . And as you go round Hampton Vale looks very different – as that was done 10 years later under a different development brief. . . . The plans shifted to accommodate new development briefs and policies. However, at the early stages we sat down and thought and talked about the principles we were going to use and then stuck to them. We were able to work out the
principles with (the consultants) and others that we were going to work including Natural England and other inputters to actually come up with those plans. Had to be approved by everybody and worked very well as we progressed”. (Hampton Visioning, 2011)

The master plan for the Hampton development also provides useful evidence of how multifunctionality and connectivity were embedded into the development through an innovative partnership of key stakeholders from the outset. Starting from what was essentially a blank canvas the development focussed on building connections through green infrastructure and corridors of movement within and without the site. The fusion of spatial planning with ecosystem services created quality water features through a sustainable urban drainage system, whilst a 40% greenspace mix across the development strengthened biodiversity as well as providing recreational spaces within a range of housing styles and densities set within distinctive neighbourhoods. These were also connected to employment and retail spaces thereby minimising the need to travel.

“No flood risk because lakes are interlinked and only one instance where water level got quite high but no flooding. People in Peterborough thought that the houses were sinking houses but there is no subsidence. Hampton is a place that won’t be flooded because the infrastructure is there in place”. (Hampton Visioning, Viewpoint 1).

It was also important to recognise how the environmental value of the site was a positive factor for the development in maintaining the distinctive identity of Hampton across similar extensions nearby outwith Peterborough.

“The idea of the countryside park and nature reserve was important to stop them [Hampton merging with Farce or Yaxley].” (Hampton Visioning, Viewpoint 2)

As well as looking inwards to the needs of the community, the responses were mindful of the need for making improved connections outside, linking the development to wider leisure opportunities across the area set within green infrastructure planning at the landscape scale.

With the cycle link the idea is to generate finance with the new city centre with here and the Great Fen (tourism project). We are trying various ways to get
moneys. We have just got some 5 million pounds for sustainable projects”. (Hampton Visioning, Viewpoint 3)

However, the responses also recognised significant negative impacts that developments in Hampton were having on the wider Peterborough economy.

“But to live here [Hampton] there is no reason to go into the city. You have all your shops here, you have the biggest Tesco here. Other areas don’t have all this. You could live here without ever leaving”. (Hampton Visioning, Viewpoint 2)

“But there is a problem here; we need to get people into the city centre. City centre seeing too many big shops being built here”. (Hampton Visioning, Viewpoint 3).

(iv) Maximising public engagement in the RUF

Securing effective public engagement was a cross-cutting theme across both visioning exercises and the workshops. Squaring the circle between ensuring effective and meaningful engagement within an efficient use of resources was seen as problematic, particularly with the predominance of top-down approaches. However, it was widely recognised that to build credibility the public must be engaged at the earliest opportunity. Furthermore, the need to engage with more ‘unusual’ suspects was stressed in providing more creative ideas which professionals might then subsequently explore.

“You need to involve the public at the outset . . . so building on their traditional knowledge as part of solutions rather than just asking them to endorse a professional solution”. (Green Economics Workshop).

“Rather than . . . so-called experts we need more creative ideas from school children . . . public . . . mavericks”. (Green Economics Workshop).

Poorly thought out participation processes lacking inclusion, deliberation and sufficient understanding of implications were seen to be artificially cheap fixes, stoking up problems for the longer term particularly where the ‘devil is in the detail’ stage is reached. Here, the need for developing tools within which the implications of particular views might be understood was seen as a key priority.

“Often people might agree a concept but don’t deal with the detail and the interlocking pieces . . . Then they oppose what they originally supported”. (BCU Workshop)

Overcoming these kinds of problems provided the inspiration for the development of Rufopoly as a research output. Its development and application was based on applying our RUF conceptual framework within a neutral and fun, learning environment as an engagement tool (Figs. 12, 14 and 15). Its simplicity has been its strength, allowing engagement with a range of different publics and agencies involving them in different kinds of thinking and deliberation that elude

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15 Rufopoly has been played with members of the Welsh Government, rural professionals, planning and built environment professionals, councillors and decision makers, INTERREG project teams, community groups and countryside management projects.
traditional consultations. A dedicated Rufopoly workshop provided important critical external discussions on the power and effectiveness of the tool.

“...it gives you a concrete way of looking at things which for someone who isn’t a planner is really helpful and all the sort of different issues are represented in a concrete way”. (BCU: Rufopoly Workshop).

“It made me think of things I wouldn’t normally think of, or have to think about” (BCU: Rufopoly Workshop).

“I liked the spatial awareness it gives you ... that you are looking beyond the site ... you are looking from a much higher perspective”. (BCU: Rufopoly Workshop)

Each managed event involves small group facilitation within which individual decisions and justifications are recorded as players move across the RUF.

“I liked the question where it stopped all the players. All players had to answer one question together and discuss options. It was interesting, the negotiation, different thoughts and backgrounds came to the fore there”. (BCU: Rufopoly Workshop)

I liked the game element that you had to move around the table, quite dynamic ... the thing that it does require is to ... requires a little bit of prior knowledge or ability to de-code the shapes and the colours. (BCU: Rufopoly Workshop)

Each journey, with its attendant trail of decisions and justifications, led to the formulation of an individual overall vision for Rufshire. Subsequently, all participants joined a group discussion and debrief where all the responses were summarised by theme with general and specific reactions and suggestions captured from all participants and facilitators. This information is then written up in a simple report format for participants. Box 2 provides an extract of such a report showing the resultant visions that were created.

The success of Rufopoly highlights the importance of developing effective communication and language tools that engage publics in novel ways outside their usual experience and comfort zones. Crucially, Rufopoly has been able to engage wider publics and professionals across built and natural environment divides. Significantly, senior managers and politicians found the game a useful tool to engage their own staff and stimulate discussion across different remits, departments and divisions.

“I’d like to play it with some development management officers to work through how you set policies in a wider context and to get a broader debate and positives and negatives of specific applications in a wider context. I think it would work very nicely”. (BCU: Rufopoly Workshop).
Box 2. Extract from a Rufopoly Report: Gaywood Valley East Anglia SURF INTERREG project.

<table>
<thead>
<tr>
<th>RUF vision</th>
<th>Question</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>A 'green thread' through the visions below is an emphasis on enhancing/maximising environmental benefits and to keep designated areas protected. Alongside, the need to better explore synergies between different sustainability strands is highlighted, especially when looking into the long-term. Community interests are generally seen as central but alongside a local dimension the wider context needs considering (e.g. taking a landscape/larger scale perspective). Economic and technology development is also explicit in the majority of vision statements. All but one explicitly emphasise 'local' and social/community benefits. Several highlight directly involving people in decision-making and creating (and implicitly realising?) future visions. A strong policy and plan-led status quo seems to emerge through most statements; firmly grounded in existing rules and regulations rather than 'out of the box' proposals (though maybe God knows a different answer here).</td>
<td>You have had a varied journey across the rural urban fringe. Please review answer cards and your plan and try to summarise your overall vision for RUShire. Think about the timescale of the decisions you have taken (short, medium and long-term impacts) and the spatial scale (very localized, wider local community and landscape, sub-regional, wider).</td>
<td>Promote economic growth whilst balancing the environment through mitigation measures (e.g. flood risk management; public transport); allow expansion of urban development; encouraging biodiversity by locals.</td>
</tr>
<tr>
<td>Greenbelt ok to go in as long as benefit to community rather than just predominantly economic. Social, environmental aspects prioritised over / stronger than economic.</td>
<td>Making maximum use of green and grey infrastructure to allow different activities as long as conflict is managed. Depart from guidance only in exceptional circumstances.</td>
<td>Building on what we have already; Buffering spatially to protect designated sites; sustainable transport; technology to be encouraged; public consultation/engagement to be encouraged.</td>
</tr>
<tr>
<td>Focus development in one area; inclusive in strategy; not excluding different types of people; a sharing of environmental and economic benefits in developments. Self-sustainability; food growing, localism, social benefits and health benefits to be encouraged.</td>
<td>Short term: localised housing in rural areas. Medium term: Develop canal but realise benefits for economy is longer term and wider national scale. Longer term: Considering the environment (both protected and non-protected) as an asset for the community wellbeing</td>
<td>Landscape scale planning with increased connectivity and restore/strengthen natural function; reduced costs long term; medium to long term planning. Shorter term: community planning; local feelings taken on board but brownfield / good design encouraged. Valuing all green space not just protected.</td>
</tr>
<tr>
<td>Protect AONB and SAC as key features of the area; maximise opportunities for biodiversity enhancement that also benefits the community for economic benefits; adhere to existing designations but seek viable alternatives.</td>
<td>Development with biodiversity in mind and promoted; manage improvements to ecosystems to ensure protection and enhancement; minimise development in the virgin environment, protect green areas. Sustainable!</td>
<td>Supply good quality / fresh food; favour urban development and avoid greenbelt development; provide facilities in rural areas if/where needed; but no connecting up / infill between rural villages and village and town; Develop local products 'rural economy'</td>
</tr>
</tbody>
</table>

God knows.
It is also important to recognise that our own project team entered a learning process by engaging in a research journey which allowed the development of Rufopoly. Team members from the built and natural environment camps gained encouragement and confidence in crossing the divide through improved joint working across their own policy practice and research boundaries. At the core of this were principles of trust, respect and collaboration which form neglected but vital pre-requisites for creative thinking to help cross the divide, whatever tools are then ultimately developed and used.

7. Discussion: from narratives towards interdisciplinary theory for integrating EA and SP

7.1. Confronting disintegrated policy and decision making in the RUF

This research has been positioned explicitly at the interface of EA and SP approaches, involving a transdisciplinary team working collaboratively across traditional boundaries (natural and social sciences; urban and rural; policy and practice) and scales (global to local). In so doing we have identified three core concepts (Connections, Time and Values), which collectively provide a new lens within a conceptual framework that allows a rediscovery of the opportunity spaces provided within the RUF (Fig. 7). This provides fertile territory from which SP itself can be revitalised in theory and practice; something that is long overdue.

The narratives presented in chapter 6 offer important insights into the extent of the built and natural environment divide and the resulting disintegrated policy and decision making that characterise the RUF. This sits with an increasingly critical literature on order, division, regulation and conformity where a planner-led ‘lens’ of order perpetuates a longstanding belief in maintaining the binary but divisive relationship of city or country, public or private, or nature or culture. Collectively this manufactures the built and natural environment divide that characterises the RUF disorder. Indeed, there is a particularly strong historical lineage specifically associated with the compulsion to classify and divide objects and areas in nature and culture (Latour, 1993). Hinchcliffe (1999), for example, explored how cities evolved by distancing themselves from nature and all that is ‘wild’, wherein nature is expunged from cities as they grow and develop over time, to the extent that nature is held up as being the antithesis of civility and culture (see also Whatmore & Thorne, 1998). Writing of the purposes of boundary making that separate nature and culture, and thus define the essence of civility, Anderson (2000, p. 312) demonstrates that this desire for expulsion requires a fundamental disengagement from all things that might be considered to be ‘animalistic’ and ‘disorderly’. Anderson also alerts us to the way in which culture-nature dichotomy takes material form in the topographical contours of the city by arguing that cities could be interpreted as monuments to people’s capacity for progress and order – as the apoge of human triumphalism over nature, of city over country, of rationality over nature’s disorderly wilderness and chaos (see also Wolch, 2002).

Such separation and rigid regulation inhibits innovation, risk taking and experimentation, hindering the adoption of adaptive management approaches linking the city and countryside; built and natural as envisaged in the SP and EA approaches. This suggests that we need to move away from prescriptive regulation and decision making towards more generic principles within which flexibility and adaptation can flourish alongside transparent and accountable decision making processes. As Fig. 16 illustrates, it is inherently a risky exercise involving a change in culture and a revisiting of the more visionary and revolutionary aspects of planning theory and practice that characterised its early inception.

Indeed, Allmendinger and Haughton (2012) argue that contemporary planning theory has been too preoccupied with pursuing a specific brand of planning which, rather ironically, has resulted in a significant disconnect between planning and other professions, allowing the separate and somewhat insular evolution of SP with limited academic and professional credibility outside planning circles (see also, Allmendinger & Haughton, 2010; Scott, 2010a). This has merely fuelled the conditions within which separatist traditions across the built and natural environment have emerged and flourished. However, our team member assessments of SP and EA highlighted in Chapter 6 show significant coincidence between the core principles of SP and EA but with important disconnects due to a combination of professional vanity, neglect and ignorance, largely shaped by planning academe itself, although its origins sit within interwar debate and the 1947 Town and Country Planning Act where urban was seen as a threat to be contained and rural was seen as an idyll to be protected with a focus on incentivising agriculture and forestry production (Curry, 2010; Moore-Colyer &
Scott, 2005). Whilst it is significant that the EA paradigm has secured more global traction than its SP counterpart, it is noteworthy that the EA paradigm has not as yet permeated into the built environment professions and associated decision makers (Scott, 2012). Thus, in many ways, the built and natural environment divide is stronger today than ever, requiring specific interventions that cross these artificial boundaries and posit more inclusive theories that unite rather than divide.

Our analyses also show that SP and EA share similar theoretical and academic weaknesses. Both are seen as theoretically abstract and complex, limiting their translation into concrete actions on the ground (Scott & Carter, 2011; Waters, 2010), although a National Ecosystem Assessment Follow-on project (2012–2014) is now operational to address this explicitly (NEA, 2012). Our contention is that, in their present form, neither SP nor EA are entirely satisfactory as integrated strategies for managing land use. However, when fused together the whole becomes much greater than the sum of the constituent parts. Crucially it is the process of that fusion that matters, set within a shared buy-in across diverse stakeholders. Collectively, this provides a more powerful theoretical ‘lens’ within which to manage across the built and natural environment. The RUF as an interface is the ideal space to invest any new fusion of theory and practice as well as seek further disciplinary intersections to improve the management of key environmental, social and economic challenges. This paper has focussed on EA and SP but other paradigms exist which equally can and should make further contributions (e.g. Building Information Modelling). Consequently, we urgently need to move away from interdisciplinary theory positioned within specific disciplinary mantras into new territory of a meta-paradigm (Haughton, Counsell, & Vigar, 2008) that has cross societal buy in.

Such thinking is not new. Paul Selman’s (2000) seminal work entitled Environmental Planning championed the conjoining of biophysical, socio-economic and built environments set within a dynamic systems perspective striving towards equilibrium (Selman, 2000). The countryside management approach (CMA) reviewed in Chapter 4 also revealed the importance of empowered champions and enablers who help people make connections across the RUF boundary spaces through small-scale countryside management projects based on core understandings of the local needs of the environment, people and place. Seemingly, both Selman and the CMA failed to gain significant traction in theory or practice across disciplines and/or professions, which provides a key lesson that any idea needs to recognise the importance of collective buy-in of key agencies and decision-makers across public and, ideally, private realms. Otherwise, they merely become ‘add-ons’ to existing theory and practice which continue in isolation. This creeping incrementalism (Curry, 1993) greatly adds to the complexity of governance arrangements resulting in further ‘disintegrated’ development, which stymies any progress in practice whatever theoretical breakthroughs ensue.

Our conceptual framework of Time, Connections and Values, therefore, provides a different set of
interdisciplinary lenses for a re-engagement with planning theory. However, applying these concepts within practice requires a change of culture across those who are involved; from policy makers to publics alike. As Meadows (1999) indicated there is a conundrum here in that culture and behaviour change is perhaps the most powerful element delivering substantive change yet the one where investment in the necessary capacity building required is rarely made (Buller & Wright, 1990). In terms of specific interventions, as the institutional memory workshop revealed, it is important to think as much about the art of ‘doing’ the strategy and theory as the purpose of the strategy itself. Here, improved dialogue, and developing transparent and coherent visions across government departments, sectors (public, private and ‘third’) and across different scales, form an important part of the necessary investment of time and resources. This becomes all the more important given the reluctance of agencies to move outside their respective comfort zones or silos (Scott, 2011a,b). It is perhaps noteworthy that the research process employed in the RUF project explicitly pushed team members out of their comfort zones in order to build the necessary foundations that have allowed this paper to be developed. Consequently, it is important to understand how our conceptual framework of Time Connections and Vales add-value to the separate ideas contained within EA and SP. It is to this that the discussion now turns.

7.2. A focus on time: learning from the past and looking to the long term future

At the core of SP and EA thinking lies the ‘transformation’ from reactive and negative regulatory activities into more proactive, adaptive and positive aspects involving motivation, facilitation and enabling functions (Albrechts, 2004; Mommaas & Janssen, 2008). Such approaches tend to be rooted in more long-term and visionary aspects as envisaged by the founding fathers of UK planning such as Ebenezer Howard and Patrick Abercombie. As Vaisisht (2008, p. 101) recognises, to achieve this there is a need for more experimentation and risk-taking if the realities of sustainable development and environmental change are to be addressed:

“…we must learn to apply an adaptive ecosystem approach to ecological planning. This will allow us to deal with the thorny issues of sustainability, itself taken complexly in regional and urban planning, in novel and ultimately more realistic ways”.

Typically this takes place at a variety of time-scales, often over decades, and at micro and meso scales, although shorter-term and macro-scale experimentation (i.e. policy experiments) can take place. For example, there is a growing literature on ‘transitions management’ (e.g. Rip & Kemp, 1998; Van der Brugge & van Raak, 2007). However, Söderman and Saarela (2010) and Allmendinger and Haughton (2009) both observe a theory-practice disjuncture and argue that, in practice, most plans are predicated upon short-termism and politisation, reflecting decision-makers’ political imperatives which are usually risk averse. Consequently, it has proved very difficult for decision-makers to move out of their comfort zone and take on board long term perspectives (Taylor, 2010). Low (2002) also argues that the essence of good planning is rooted in long-term considerations. Drawing from work by Polanyi in the 1950s, he argues that social and environmental change agendas require 50 year timeframes as short-term issues readily distort planning agendas.

Such views question the efficacy and relevance of the contemporary decision-makers’ toolkit which appears rooted in the short-term. Albrechts (2004, p. 750) challenges us to develop better tools for looking at the future:

“Strategic planning ‘creates’ a vision for a future environment, but all decisions are made in the present. This means that over time the strategic planning process must stay abreast of changes in order to make the best decisions it can at any given point”.

Thus scenarios have become the principal vehicle to address these longer-term considerations as reflected, for example, in the UK National Ecosystems Assessment (2011), Foresight Land Use Futures Project (2010), the 100-year horizons of the new Shoreline Management Plans (Defra, 2006) and tourism and the economy studies (McEvoy et al., 2006). However, their sometimes uncritical use, the frequent lack of their incorporation within subsequent policy making and planning processes, and their dominance by experts as opposed to lay publics, all suggests that short-term political interventions still prevail (Scott, 2010a). For example, Söderman and Saarela (2010, p. 118) identify this problem within a critical review of Environmental Impact Assessments:

“Because of EIA’s narrow time and geographical frame, limited number of alternatives and reactive character, it has been concluded that EIA cannot successfully treat longer term trends, ecosystem processes and interactions, cumulative threats, implications on uses of biodiversity or monitoring”.
Moreover, the success of long-term planning is limited by the reluctance of decision-makers to employ reflexivity within their areas of work and learn lessons (Bull et al., 2008; Inch, 2010; Taylor, 2010). Clearly, long-term ecological studies and environmental baselines should become more influential in informing decisions in the planning process. Yet such studies in themselves are increasingly contested amongst scientists, hindering a clear direction of travel and are vulnerable to cuts and withdrawal of funding (e.g. NEA, 2011; Foresight, 2010). For example, the recent NEA (2011) is driven by the need to value nature in order to incorporate it within the economic models that drive planning policy. Yet this dilutes the environmental ethic by putting a price on something which may be irreplaceable, essentially commodifying nature and ignoring issues of incommensurability (e.g. O’Neill, 2001, 2007; Spash, 2008). Furthermore, Opdam et al. (2002) highlight the application void between ecological knowledge and spatial planning, with an urgent need to develop and integrate much more quantitative ecological knowledge at the landscape level. From a landscape architect and development perspective Jarvis (2010) identifies the need for clear trade-offs, yet this may be difficult to negotiate or fundamentally impossible due to value incommensurability.

7.3. A focus on connectivity and crossing boundaries

Connectivity has its roots in ecological theory (e.g. Krobry, Tewksbury, Haddad, & Hoekstra, 2010; Holling, 1973; Gunderson & Holling, 2002), yet is equally a powerful concept in SP as the focus moves from the management of places to consider the connections and interrelationships between them (e.g. Albrechts, 2004). Both EA and SP approaches provide an opportunity to take a holistic, systems approach to place-making. In the same way that ecology seeks to understand relationships between populations of different species from the scale of the organism to the habitats and ecosystems to which they belong, EA and SP approaches consider relationships between different sectors and interests (horizontal) and from neighborhood to global scales (vertical) as the basis for decisions that will inevitably have repercussions across the land use system (EUROCITIES, 2004). Consequently, we need to work across disciplinary, professional and administrative boundaries, mindful of the inequities of power and influence involved (Phelps & Tewdwr-Jones, 2000). Here, the landscape scale becomes a laudable goal to loosen the boundary mentality, but there are significant cultural and property right barriers to overcome (Prager et al., 2011). It is here that the partnership concept has been advanced as the principal delivery vehicle for connecting multiple interests from across different sectors and scales across the rural-urban divide (Bachtler & Michie, 1997; Davidson & Lockwood, 2008; Roberts, 2003; Scott, 2003a,b). However, little critical research has been undertaken into their overall effectiveness and suitability for this stated purpose. Thus partnership approaches to EA and SP at landscape scales have often been beset with challenges around legitimacy, accountability and equity (Dargan and Shucksmith, 2008; Derksen & Boch, 2009; Edwards et al., 2001; Hague, 2004; Valentinov, 2008).

For these initiatives to connect effectively across such diverse interests there is much to learn from best practice lessons emerging from the literature on stakeholder participation (Reed, 2008).

Within a planning context, recent developments in green infrastructure perhaps offer the greatest potential for providing and facilitating this new multi-scalar and multi-sectoral focus on building successful partnerships (Kambites & Owen, 2006; Natural England, 2009; RICS, 2011). Here, practice has advanced theory with, for example, Birmingham City Council’s 9-piece jigsaw initiative involving partnerships across the key sectors of spatial planning as well as buy-in from the new Local Enterprise Partnerships (Birmingham City Council, 2011),\(^\text{16}\) whilst Worcestershire’s Green Infrastructure Partnership has developed innovative concept statements which have been welcomed by the politicians and developers alike and incorporated within emerging core strategies (Worcestershire Green Infrastructure Partnership, 2011). In both cases their success is due to their wider political acceptability within local governance structures and planning processes. Both EA and SP frameworks endorse the partnership ideal with many structures currently in place stemming from global and European considerations (e.g. Local Biodiversity Action Plans – Selman & Wragg, 1999; River Basin Management Plans and SAC committees – Mostert et al., 2007; Green Infrastructure – Worcester GIP, 2011). There are also ad-hoc joint working arrangements regarding green belts and a whole host of other

\(^{16}\) Local Enterprise Partnerships are voluntary, non-statutory partnerships led by local authorities and businesses across natural economic areas. They are tasked with providing the vision, knowledge and strategic leadership needed to drive sustainable private sector growth and job creation in their area (BIS, 2012) http://www.bis.gov.uk/policies/economic-development/leps Accessed 23.04.12.
voluntary fora (e.g. Connelly, Richardson, & Miles, 2006; Edwards et al., 2001).

Improving connectivity through successful vertical (between spatial scales) and horizontal (across sectors and interests) integration arguably represents the elusive holy grail of both EA and SP (Prager et al., 2011). Biesbroek, Swart, and Van der Knaap (2009), in discussing multi-level governance of multi-sectoral challenges for climate change mitigation and adaptation, note that SP is suitable for an integrative approach but needs to evolve. In dealing with ‘wicked’ problems, decision-makers need to be multi-tasking the coordination of local preferences, contexts and stakeholder initiatives horizontally across sectors whilst concurrently addressing vertical integration of decision making across spatial scales. Harris and Hooper (2004) suggest that the horizontal integration of public policy has tended to dominate the UK agenda at the expense of the vertical (multi-scalar) perspective, leading to important disconnects in the way space is managed. Strategic planning needs innovative actors to help forge new forms of collective action and partnership working across these scales, notwithstanding the inherent complexities involved (Newman, 2008).

Success is, therefore, dependent on adopting approaches involving multiple stakeholders within more inclusive endeavours and actions (Tress et al., 2005). Understanding and maximising the connections between places, institutions, people and environment in pursuit of a shared vision and joint outcomes become the key challenges of a new governance agenda which now involves a plethora of interests (Carter & Scott, 2011; Jordan, 2008; Lockwood, 2010). But this kind of activity tends to be time consuming, costly and challenging, currently proving the exception rather than established practice (Scott, 2011a,b).

Nevertheless, the everyday practice of SP and EA has failed to maximise connectivity partly due to ongoing barriers of institutional myopia hindering integration (Jordan & Halpin, 2006; Scott et al., 2004) and poor communication between planners and other specialist staff, as well as a general reluctance to work outside traditional comfort zones (Taylor, 2010). The ‘target culture’ has been a major contributing factor to this. As Stonyer (2010) observes “On two occasions I have experienced planning officers approving proposals without formally consulting specialist officers due to the eight-week decision deadline”. Scott (2012) laments the missed opportunities for cross government connections within the recently published National Planning Policy Framework (Department for Communities and Local Government, 2012) and the Natural Environment White Paper (Defra, 2011) notwithstanding the important recognition of the value of ecosystem services within paragraph 109 of the NPPF. Yet both documents profess to be core components of a sustainable future land use strategy. Clearly, sectoral thinking still prevails within the UK government within an environment-planning divide, hindering important connectivity that will aid joined-up planning (Keating & Stevenson, 2006). Indeed, the academic sector exacerbates this problem with its specialised departments, disciplines and research assessment panels which tend to discourage (penalise or not recognise) working across boundaries (Campbell, 2005; Tress et al., 2005). Existing rules and regulations (planning law and international agreements) also tend to be framed within specific sectoral objectives, lacking enabling structures or core principles to achieve integration.

Notwithstanding this critique, integration is rarely challenged as a desirable or necessary goal itself (Mommaas & Janssen, 2008; Vigar, 2009). Mommaas and Janssen (2008, p. 27) contend that, all too often, integration can result in compromises in which too many things are interwoven. The resultant effect is a dilution of actions with radical thinking and innovation replaced by conservatism and risk-averse strategies (Vigar, 2009); a lowest common denominator approach that rarely offends anyone, but means little in practice. Indeed, the partnership delivery vehicle often involves powerful stakeholders and vested interests who largely determine agendas and outcomes, thereby securing and maintaining their own particular sectorally defined positions and power bases (Derkzen & Boch, 2009; Edwards et al., 2001).

Furthermore, this vertical and horizontal ‘rescaling’ of issue agendas dramatically increases the range, number and complexity of actors involved and consequent policy processes within new alliances, stakeholder partnerships, and consultative processes (Allmendinger, 2009; Allmendinger & Haughton, 2007; Healey, 2006). Multi-level or even ‘meta-governance’ and decentralisation processes aim to achieve subsidiarity (Jessop, 2003). Yet fundamental tensions and inconsistencies exist between the rhetoric and practice of collective versus individual action, and between master plans and grassroots participation (Allmendinger & Haughton, 2009). Achieving this balance and facilitating the ideal of communities being able to influence the planning process through participation is rarely realised due to the operation of power relations within consensus-seeking processes (Albrechts, 2004; Herbert-Cheshire and Higgins, 2004; Shortall, 2008). “In practice, the more powerful stakeholders largely
determine the outcome of the planning process” (Mommaas & Janssen, 2008, p. 7). It is becoming evident that the success of consultation is increasingly elusive as consultation fatigue (Richards, Blackstock, & Carter, 2007), public cynicism (Scott, 2003a,b) and tokenism (Stirling, 2006) all commonly feature. Indeed, participation can be viewed as an inherent good without wider recognition of the problems of poorly thought through participation processes and outcomes that tend to characterise public policy (Beierle & Konisky, 2001; Scott, 2011a,b).

A renewed focus on consultation and deliberation within the new governance agenda is designed to eliminate poor decisions and improve transparency and legitimacy, thereby resulting in higher quality, bespoke plans, connected to the needs of local areas (Reed et al., 2010). Yet indirectly this can lengthen timescales through protracted negotiations and trade-offs between all the involved stakeholders (Wood, 2008). Vigar (2009) also highlights that, although the frameworks facilitate better integration to achieve planning goals, they may also create conservativism, clientelism and even conflict, leading to what Stoker (1998) sees as a ‘congested state’. Allmendinger and Haughton (2007, 2009) suggest that this is important as the increased number of stakeholders in planning processes can lead to delays in the statutory planning process which can lead to powerful stakeholders using alternative routes such as fast-tracking major developments through national infrastructure development decision making processes, taking decisions away from local planners. Alternatively, there is the parallel development and use of informal strategies and plans which provide more rapid and flexible outputs. Whilst these might complement the statutory documents they have the capacity to confuse, duplicate and/or contradict emerging policy. Indeed, commentators have argued that such complexity hinders the very connectivity that forms a vital part of the spatial planning rhetoric, thereby leading to more ad hoc and singular responses (Keating & Stevenson, 2006; Taylor, 2010).

7.4. Managing contested values and the art of good decision making in the RUF

Identifying, mediating and managing contested values lies at the heart of SP and EA planning processes. The process of planning seeks to actively identify, survey, assess and reconcile these competing interests, with the resultant decisions made in the ‘public’ interest (Schiessel et al., 2012). This is often highly problematic, leading to significant contestation and protest (Woods, 2003). Thus how do we value aspects of the natural environment, particularly when set alongside other economic and social imperatives? From our primary research findings, it is clear that economic values dominate and prevail within decision making processes owing to their easier measurement and identification. In response environmental valuation methodologies have proceeded at a rapid pace spurred on by the support of research funding for ecosystem services and ecosystem assessment which has led to robust and credible methods to put a price on nature and thus embed in policy (e.g. the Natural Capital Committee in the UK government). However, such endeavours raise important questions about components of the natural environment that do not (currently) have a human use? Previously, Ratcliffe’s (1977) nature conservation designation criterion of ‘potential value’ offered an initial mechanism to take forward. Now with the advent of the EA and the ecosystem services framework there is clear methodological advance. However, Carter (2010) warns that “our approaches to accounting for ecosystem services may, however, be too anthropocentric, simple and mechanistic and not closely enough aligned to natural processes, fluctuations and complexities,” thus failing to adequately account for system integrity, non-linear behaviour, thresholds and dependencies. There is a growing literature about synergies and trade-offs between existing ecosystem services (e.g. Reed et al., 2013), but recognised ecosystem services may transform over time as our needs and perceptions change, and current specific interpretations and uses of ecosystem services might compromise our ability to realise future uses (Reed et al., 2013).

The anthropocentric nature of the ecosystem service concept lends itself to focusing only on those services relating to the obvious needs and priorities of those who use them resulting in deficits of some services: cultural and supporting. Decisions about the spatial arrangement, intensity and functionality of land uses and management practices must therefore consider societal preferences for different ecosystem services, which may differ from location to location and change over time (Carter, 2010; Leach & Crean, 2010). This focus on adaptive management views natural resource management as dynamic, complex systems in which humans are intrinsically linked to the environment (Holling, 1978; Walters, 1986). It acknowledges limits to predictability (Levin, 1999) and accepts that knowledge about social and ecological systems is both uncertain and pluralistic (Carpenter & Gunderson, 2001). Consequently, the EA approach emphasises the
co-production of knowledge and learning, as adaptations are tested through experimentation, and results inform subsequent decisions and further experimentation where necessary (Clark, Jager, van Eijndhoven, & Dickson, 2001; Stringer et al., 2006).

However, environmentalists and planners bring their own professional values which impose a particular spatial order and way of seeing and measuring things (Lefebvre, 1991; Qviström, 2007). Arguably, this may restrict innovation and change itself. For example, the desire to zone development within particular use class orders, and the unquestioning protection of green belt and grades 1 and 2 agricultural land, collectively may actually work against experimentation using adaptive management frameworks (Schiessel et al., 2012). The current use of the National Vegetation Classification (NVC) by ecologists hinders the identification and management of peri-urban environments (currently excluded from such surveys) and can easily lead to a decision making process based on out-of-date data via the increasing reliance on desk-based assessments rather than more accurate field assessments (Qviström, 2010).

Understanding the way in which wider publics value and order spaces and places, therefore, forms a vital part of the evidence base. However, there is widespread concern at the lack of time and resources devoted to such participatory processes, particularly at the plan level. Whilst there is a relative armoury of techniques now available (Richards et al., 2007), there is concern that the economic driver prevails in decision making processes leading to a situation “where we value what we measure as opposed to measure what we value” (Scott & Falzon, 2004). Furthermore, political considerations can readily distort planning processes and decisions which increasingly render statutorily approved policies within development plans impotent and irrelevant (Phelps & Tewdwr-Jones, 2000; Scott et al., 2009; Fig. 1).

The perceived failings of professionals in embracing more holistic multiple value approaches may, in part, be attributed to the limitations of their jurisdiction (Scott, 2010a; Tewdwr-Jones, Morphet, & Allmendinger, 2006). Campbell (2002, p. 282) argues that because planning problems are inherently contested, we need an appropriate basis for ethical judgement based on a relational understanding of society requiring “situated judgement with and for others in just institutions.”

The broader environment within which decisions are made therefore requires a good evidence base. However, Nadin (2007) argues that, in reality, there has been a limited evidence base supporting the formulation of plans and planning decisions which then creates a situation where planning on presumption prevails (Curry & Pack, 1993). Furthermore, there is emerging criticism that decision-makers use selective evidence more to justify a particular view; policy-based evidence (Scott, 2013). The changing nature of governance becomes important here as increasingly values are driven by different scales of influence. For example, the influence of Europe has been pronounced within a range of Directives (NATURA 2000; Water Framework Directive; Strategic Environmental Assessment and Environmental Assessment) where, in theory, environmental values have been elevated to the primary consideration in decision making processes. In reality, however, breaches of such protocols attract limited EU sanctions and there is emerging evidence of poor-quality plans as a result (for example in Strategic Environmental Assessment see Fischer, 2010; Therivel, 2009; Therivel & Walsh, 2006). This raises vexed questions of how much and what type of evidence is needed for decisions and what constitutes valid evidence, especially in highly contested areas or where knowledge is combined from multiple sources, including local, novice and/or expert sources (Counsell, 1998; Raymond et al., 2010). Our depiction of disintegrated development (Fig. 1) highlights how this filtering of data through the many separate lenses and gatekeepers can pervert, restrict or subsume valuable evidence. Here, Söderman and Saarela (2010) are particularly critical of the way in which environmental values have been diluted in spatial planning processes.

7.5. Nurturing the SP and EA dimensions of planning theory and practice

Our results suggest that improved management of the RUF can be started by focussing on the generic concepts of Time, Connections and Values as core components of any plan or intervention. This is not new when we consider the interdisciplinary roots of planning (e.g. Tress et al., 2005) where the ideas of Abercrombie and Ebenezer Howard provided both visionary and positive outcomes with global impacts. Our Hampton case study also showed how a translation of such concepts has led to an exemplar development over a 25-year period (Natural England, 2009). Realising this in practice requires an inclusive dialogue, experimentation, long-termism and risk-taking; all activities which are seemingly inimical to current SP practice (Qviström, 2007; Taylor, 2010). Whilst there have been some encouraging efforts to tackle this challenge such as: joint agency working across
geographical scales and boundaries (e.g. regional spatial strategies; Hanusch & Glasson, 2008); removing administrative barriers (e.g. joint/community management of resources; Herbert-Cheshire and Higgins, 2004; Marshall, 2005); venturing into new domains lying outside of ‘traditional’ land use planning (e.g. urban agriculture and rural allotments (Adams et al., 2013); forging innovative partnerships and collaborations (e.g. Green Infrastructure partnerships encompassing climate change mitigation and adaptation, health and well-being, economic investment and regeneration (Worcestershire Green Infrastructure Partnership, 2011); and working across new domains (Scott et al., 2004), these still remain notable exceptions rather than established practice (Scott, 2011a,b).

In seeking solutions to overcome this, it is vital that planners work more effectively through undertaking joint ‘journeys’ with other built and natural environment professions, who straddle the built and natural environment divide as well as wider publics including ‘unusual suspects’. Within our own research team, this process has blossomed into a series of productive relationships leading to new joint endeavours in key areas relating to environmental change (e.g. Reed et al., 2011; Prager et al., 2011; Scott & Collier, 2012) and new contracts in the UNEP WMC National Ecosystem Assessment follow-on programme 2012–2014 (NEA, 2012). However, within the contemporary institutional arrangements in England, Local Enterprise Partnerships with their Enterprise Zones and economic development fix, and Local Nature Partnerships with their Nature Improvement Areas and environmental fix, show graphically the current trend towards policy disintegration is still flourishing (Fig. 2). The resultant institutional landscape is potentially creating a situation which will actually exacerbate conflict in the short term as plans and strategies are produced without all the relevant parties being around the table at the start.

Set within a wider global discourse about the future of the RUF, the outlook is not entirely gloomy (Gallent et al., 2006; Low-Choy et al., 2008; Piorr et al., 2011; Qviström, 2010). There is a ‘hunger’ and willingness for making connections and identifying new opportunity spaces. Here the importance of dialogue between planners, policy-makers, and voluntary organisations is key; where conceptual and skills barriers can be lowered/removed and new connections forged. However, securing the time and space, and political commitment, for these up-front discussions remains problematic. The experience of the Worcestershire Green Infrastructure Partnership (2011) in securing partnerships and discussions across built and natural environment professions is influential here resulting in concept statements being embedded within statutory development plans. Indeed, there are further seeds of cultural change through hooks in existing regulations and policy documents or future adjustments; this may lead to planning practice actually driving a more generic meta – theory for management and decision making for the environment as envisaged by Haughton et al. (2008). This becomes important as currently SP and EA each champion their own particular brand of working, which is clearly counterproductive. What is required is a culture change to give up some of this theoretical and professional sovereignty in order to reconnect the built and natural environment divide and address the disintegrated development that characterises many planning responses in the contemporary and historical RUF. Ultimately SP and EA individually become hindrances to the achievement of this and there needs to be a dialogue to build on our initial synchronisation of SP and EA based on mutual trust, respect and a quest for improved understandings as we seek to address the environmental change agenda.

7.6. Conclusion

In this paper we have started a research journey of rediscovering the RUF, identifying, developing and testing academic, policy and practice planning frontiers. The RUF now represents the dominant space globally, requiring explicit policy interventions that manage the RUF as a place in its own right. Yet contemporary policy responses are rooted primarily in disparate urban or rural domains, with the RUF viewed as a repository for urban-centric development. Our focus on the rural–urban dimension exposes significant new opportunity spaces, challenging conventional land use theories and models. However, realising these opportunities are frustrated by a significant divide in the way the built (urban) and natural environment (rural) are planned for, dating back to the interwar period in England. This divide is also evident in a range of international examples with serious implications for the way the RUF has been addressed in policy and practice interventions, leading to significant policy disintegration.

Whilst the contemporary paradigms of SP and EA offer more integrated and interdisciplinary research approaches to managing RUF environments, they themselves may contribute to the divide unless they become more effectively embedded in planning processes across the natural and built environments. Currently, much policy and practice remain rooted within sectoral inertia and myopia in favour of
protecting the status quo. The proliferation of new governance arrangements, each with their different policies, plans and projects, leads to an ad-hoc, chaotic policy landscape characterised by uncertainty and short-termism. This is at its most pernicious in the RUF, which has become a forgotten and somewhat accidental space, straddling town and countryside and escaping wider academic inquiry. This, in turn, hinders the delivery of effective planning, as plans and strategies are being developed in isolation from each other, creating scalar and sectoral disconnects and neglecting the interrelationships affecting the wider landuse system where the RUF is a core component.

Through our narratives of disintegrated development, we have stressed the need to reduce agency insularity and policy disconnects in favour of more inclusive, adaptive and integrated structures for planning and managing interactions across economy, society and the environment. In this way decision-makers and other stakeholders can start to see the bigger picture and make more informed choices.

In pursuit of this strategic planning ‘holy grail’, we have fused SP and EA frameworks into a hybrid meta-paradigm for the built and natural environment (Fig. 7). Using bridging concepts of Time, Connections and Values this paradigm explicitly straddles the built and natural environment interests by embedding the ecosystem approach in spatial and strategic planning. It uses accessible language and concepts that resonate across different publics and decision-makers, facilitating policy responses that cross the divide. This operates at the overlap between a much wider range of sectors and interests, in pursuit of multifunctional and SMARTer planning agendas that are increasingly needed because of rapid environmental and climate change together with other key social, political and economic challenges and uncertainties.

Progress is secured through undertaking a journey of professional self-discovery and learning allowing the boundaries that currently restrict joint working to become more fluid and permeable as opportunity spaces emerge. In such respects we argue that the terms ‘urban’ and ‘rural’ become increasingly redundant as we re-think how spaces can be re-constructed and managed at these ‘messy edges’. Ultimate success is dependent on publics undertaking their own processes of self-discovery and learning, as experienced within the RUF project team itself, reconnecting the wider built and natural environment silos. In so doing the emergence of Rufopoly provides one innovative example of a learning tool allowing people to think and learn outside the normal contested spaces of decision making.

Significantly, new thinking along these lines is already present in aspects of national planning policy in England, with important hooks evident in the NPPF (DCLG, 2012, pp. 25–26).

“109. The planning system should contribute to and enhance the natural and local environment by:

- protecting and enhancing valued landscapes, geological conservation interests and soils;
- recognising the wider benefits of ecosystem services;
- minimising impacts on biodiversity and providing net gains in biodiversity where possible, [...]establishing coherent ecological networks that are more resilient to current and future pressures”.

This represents an influential bridge that can help planners start to cross this divide within more creative solutions for development where the environment is seen as a significant asset, not just a bolt-on extra. Such thinking is enshrined within a global context in work by the Economics of Ecosystems and Biodiversity (TEEB; e.g. TEEB, 2010) programme and Millennium Ecosystem Approach (2003).

Progress ultimately depends on the willingness to engage widely in a new constructive dialogue and way of working that crosses the planning and environment divide. Here the need to invest in substantive cross-sectoral and cross-scalar partnerships that unite rather than divide is crucial in breaking down barriers. But there is still much work to do as there remains a predilection for adding new layers of governance affecting the RUF without any strategic consideration of how to improve the delivery and maximise social, economic and environmental benefits. The need to break down the artificial boundaries we all too often impose on our work practices, be it through jargon, institutional myopia or poor communication, demands significant resources to change existing behaviours. It is here that improved training and education is key, set within a more pluralist and interdisciplinary curricula moving away from the specialisation and insularity that is still evident in many professional built and natural environment bodies and courses. We urgently need to build stronger, more secure bridges to cross the divides between disciplines, between academics, between practitioners and between stakeholders, if we are to deliver the kind of joined-up planning we seek and increasingly need. We argue that the processes and outcomes in this research provide the conceptual bridge to enable spatial planners to champion further crossings that are vital for planning’s future evolution and success.
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