ADDRESSING FUZZY RESPONSIBILITIES WITH INFORMAL, FLEXIBLE INSTRUMENTS: LANDSCAPE PARKS AND REGIONAL PLANNING

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Keywords: Landscape Park, Regional Planning, Land Management

Abstract

Green belts, smart growth or minimum residential densities have been some of the planning policies and instruments employed to reduce low-density, fragmented urbanisation that is generally deemed unsustainable. However, success of such tools in metropolitan, geopolitically fragmented areas involving many different municipalities is often hampered by a combination of lack of political will and diffuse (or fuzzy) *responsibilities in multi-actor settings. Indeed many traditional planning instruments are inadequate at regional scales. This paper reviews the emerging concept of regional landscape parks in various European countries as a mostly informal instrument that nevertheless can shape settlement patterns at regional scale in multi-actor governance settings. While drawing on several examples* throughout Europe the Stuttgart Region s Landscape Park is used as m *study. The development of the landscape park is not a legally required activity within the planning system, yet there is evidence that the voluntary leadership of the regional planning association in developing the Regional Landscape Park complements traditional landscape management and nature preservation instruments. The policy language actively broadens the discourse around landscape conservation and urban development to supersede the traditional distinctions of urban and natural areas. This allows for the inclusion of economic, social, environmental and cultural arguments in decision making regarding landscape, land use and nature protection. The analysis suggests that by drawing flexibly on ideas and concepts from different disciplines a wide range of actors and agencies can proclaim benefit and in turn assume responsibility to help build a productive, healthy, and ecologically valuable urban regional landscape.*

1. Introduction

For decades, planners in many densely populated industrialised nations have been searching for appropriate ways to manage urban growth and sprawling settlement pattern. Green belts, smart growth and minimum residential densities have been some of the planning policies and instruments employed to reduce low-density, fragmented urbanisation that is generally deemed unsustainable in more than one way. For one, low-density development undermines the feasibility of public transport and is positively correlated with private car ownership and use. Second, land is an essential, multifunctional but increasingly limited and contested resource required not only for urban development but for the production of food, construction material and renewable energy generation (biofuels, wind- and solar farms). The conversion of forests, open spaces and agricultural land into more or less dense (sub)urban areas has well documented environmental detriments (e.g., Johnson, 2001; Thomas, 2011), which ultimately will degrade human health and quality of life (TEEB, 2010). It is thus important to protect open land for valuable ecosystems service provisions now and in future. Despite sound scientific evidence in respect to unwanted effects, land conversion from agricultural, forests and pasture to urban and infrastructure uses remains considerable. At the end of the first decade of the 21st century, in Germany, for example, an average of more than 100 ha of land were converted into urbanised use (housing, commercial/industrial or infrastructure) on a daily basis (Bundesregierung, 2008; Thomas 2011).

However, the problem is not merely a quantitative one. Simply keeping land from urban development is neither a sustainable nor desirable solution. Agricultural rural landscapes although associated culturally with healthy lifestyles and nature may not feature high levels of biodiversity and ecosystems services. In fact, in some instances urban environments display higher levels of ecological quality and biodiversity (e.g., Lachmund, 2013). As the importance of protecting and maintaining not only open space *per se* but also ecological qualities such as biodiversity and ecosystems functions gains increasing currency there is a need to reconceptualise the human-society nature relationship in respect to land use management on one hand, and on the other, operationalise and implement such an alternative relationship by making it visible in the built environment.

The need to find new images and imaginations for our cities is not a new one. There is no lack of astute observations as to the changing morphologies of urban settlements over the last few centuries from compact, clearly delineated cities into modern polycentric metropolitan agglomerations, edge cities (Garreau, 1991), or metaphorically scrambled eggs (Price, 1982). The thinning of urban structures has been likened to a Fordist dispersal of production patterns regionally, nationally and globally (Schumacher and Rogner, 2001). Traditional planning instruments and even modern adaptations have had little success to halt or slow these trends which could only be reversed through considerable increases in energy costs, and decreases in income (e.g., Sieverts, 2001). Instead, it may be more fruitful to develop alternative conceptions of settlement patterns. Landscape urbanism (e.g., Waldheim, 2006) and regional landscape parks (e.g., Otto, 2006) could be starting points for the development of a new type of urban vision.

This contribution looks at the emergence of an emerging planning and land use management instrument that is increasingly employed at strategic level in metropolitan regions in Europe: regional landscape parks or regional parks. These regional parks have become a means by which actors re-imagine city-regions and metropolitan agglomerations as urban landscapes where natural open spaces are holistically integrated, made accessible and often are protected throughout. While the definition of the landscape park concept is still developing and its detailed aims and goals vary from case to case there are some general characteristics. The role of land use categories is diminished with many plans abandoning artificial divisions between urban and non-urban areas with the aim to enhance the ecological and recreational quality of *all* open spaces small and large. In many cases, this entails changing users aesthetic conceptions and understanding of natural processes, ar rather than fighting it. The approach offers interesting opportunities and challenges for future plan development at regional scale that could provide win-win strategies for high quality regional development which will need to be shaped by a pattern of multifunctional spaces that intelligently organise biophysical constraints and characteristics.

Using different examples of landscape parks in Europe and Germany in particular, the paper will derive common characteristics, policies and goals by those who are promoting, establishing and implementing this concept. Using then, the case study of the Stuttgart Region Landscape Park, we will explore implementation and operationalization successes.

2. Changing Conceptions of Human-Nature Relationship

Fundamentally, and theoretically, we can distinguish two opposing conception of nature. On one hand there is a holistic view of nature which includes humans. Humans are here understood not as separate but an integral element of nature, part of the ecosystem and food chains. This implies respecting nature and a valuing nature as equal. On the other there is a rationalist, reductionist perspective which perceives nature and object and conceives humans as separate and superior to nature. Nature is a

economically measurable resource and might even be worthy of protection as part of its contribution to ecosystems services.

Practically, human s and society s relation to nature and the environment is complex and At a personal level our views of open, rural land and nature tends to depend on the geographic locatedness and economic circumstances we live in. Values and conceptions are culturally constructed. For example, the urbanite frequently perceives open/rural land as an area for recreation and leisure providing respite from the concrete hard spaces of the inner city. This land and its natural elements therefore are worthy of protection. Yet, for a farmer, the land is a productive resource and livelihood. As the value of open space or agriculture land tends to be lower in financial terms compared to sites available for development (Thomas, 2011) there is considerable economic pressure to convert open spaces into higher valued commercial land uses. Moreover, over time, the human-nature relationship conceptions have seen considerable mutations and change. These have been documented elsewhere in detail and full coverage would be beyond the scope of this paper. Instead the only a few select re-conceptualisations with relevance to land use management will be addressed briefly.

One notable shift is an increasing realisation that economies must preserve and sustain natural capital as with and overexploitation of (non-renewable as well as renewable) natural resources economic success itself will be jeopardised. This has led to the recent attempt to value and in fact monetize the nature in respect to ecosystems assets or the services nature provides to human life and wellbeing. As such, open spaces and nature are conceived as essential due to their ability to providing a multitude of life sustaining eco-system services. They clean the air and water, and provi material etc. (TEEB, 2011) and so forth.

Another transformation is the view that the divide between nature and culture is an unproductive one particularly in respect to landscape. Rather Tress, et al. (2001) argued that all landscapes are multifunctional and multidimensional encompassing both a natural and cultural component. Phillips (2003) suggested in fact that new paradigms for protected areas have been emerging since 1990s around participatory natural resource managements, a strong alignment with needs of rural inhabitants, and alliances with grass-roots. Such protected areas are often governed and managed by multiple partners and pursue both social, economic and leisure objectives in parallel to conservation, nature rehabilitation and protection.

3. Regional Landscape Park an emerging definition

The concept of a regional landscape park is a relatively new one; hence it is not surprising that a common understanding and definition is only slowly emerging. More precisely, landscape parks are understood differently in different national contexts. Some countries use the term landscape park regional landscape park to acknowledge a territorial designation of an area w of nature (fauna/flora) protection within the parks boundaries. The nature protection is typically at a significantly lower level than that applicable within for example a national park. In other countries the label landscape park is applied as a soft, informal instrument to facilitate land use planning and management goals. While in the first instance, the regional landscape park designation aims to demarcate and safeguard open spaces in planning terms in the second instance the main aim is to provide and enhance leisure opportunities that make the (natural) landscape accessible to the public while maintaining and improving ecological and aesthetic qualities. It is important that the landscape parks in many cases are including urbanised areas and cities. Landscape parks build on holistic design concepts that connect the demands of recreation, nature conservation and agriculture in cities and their surrounding rurban fringe and hinterland. The landscape park represents a vision and idea that

initiates the development of an identity and plans which capture these ideas visually. The process of plan development creates consensus, buy-in and value.

In this sense the landscape park is not a traditional mechanism of nature conservation or preservation but rather a manifestation or instrumentalising of the concept of landscape 2006) an idea developed in the late 20th century. According to Corner (2003) and Weller (2008) landscape urbanism is seeks to reclaim structural influence over urban development plans and projects. It aims to conceptualize and then directly engage the city and its natural, chaotic ecology and to interpret landscape systems so that they in turn can influence urban form in open ended design strategies (Weller, 2008, p. 256).

3.1 Landscape parks in Germany

In Germany a host of regional landscape parks have been established in the last 10-20 years. They vary in size and governance and their goals

Table 1. Comparison of German Landscape parks: Size, Goal and Governance

	State/ size and date established	Goals/ Aims, features	Governance
Emscher Landschaftspark	North Rhine West-phalia, 320 sqkm, ca. 1990; intent to enlarge area by 116 sqkm	Culture, nature and leisure park; network of linked green open spaces, sustainable	KVR and municipalities together with IBA office (1989-1999); from 2004 under new Project Ruhr Gmbh lead.
Regionalpark Rhein Main	Hessia, 1988/89	Form network of green areas (green wedges, srips), regional identity creation, leisure access	Planning association of agglomeration Rhein-Main (no finances, weak); require to obtain support from local municipalities
Regionalparks Brandenburg	Brandenburg Multiple chain of parks surrounding Berlin	Retain urban edge, leisure	
Landschaftspark Region Stuttgart	Baden-Württemberg, ca 3650 sqkm	Identity creation, leisure, attractive environment, economic and ecological	Regional planning Association

4. The Stuttgart City-Region Landscape Park

The Stuttgart region is one of 12 areas designated for the purpose of regional planning in the state of Baden-Württemberg. The region has a polycentric urban character and is home to 2.7 mio inhabitants and 1.03 mio jobs. It consists of 179 municipalities which include the state capital of Stuttgart with 590 000 residents alongside many smaller cities and villages such as the village of Drackenstein with merely 450 residents. It covers a land area of 3654 skm which makes it equivalent the size of the largest national park in the UK (Cairngorms National Park). These 179 municipalities are grouped into 5 counties. The region has a relative high population density of 732 persons/skm. Just over 20% of the land area represents urbanised land and road infrastructure, 30.5% is forested and 46% is in use for

agriculture. The region is economically vital with a vibrant SME sector and a high level of manufacturing and production of 40% linked to the motor industry, electronics and engineering (Frank and Morgan, 2012).

The landscape park is in its boundaries congruent with the regions boundaries. The idea to create a region-wide landscape park emerged shortly after the regional planning authority was formally established in 1994. Its underlying concept was guided by the view that landscapes with typical regional character represent soft factors that support the development of identity and increase attractiveness of the core city and the hinterland (Otto, 2006, 18). The regional landscape park as a purposeful designed and created landscape is to move beyond the simplistic division of land areas into nature preserve on one hand and productively used land resource (Nutzland) implication of this traditional division is that land (and the associated resources of flora/fauna) in protected areas are economically relatively unproductive whereas outside such protected areas land can be economically exploited. In practice of course the distinction has never been quite so simple and dichotomous. The emergence of eco-systems services has started to change the value attributed to seemingly un-used landscape. Another way to change the perception of nature is by increasing the appreciation of landscape design interventions and through re-designation as a park (Schmelzer and Bezzenberger, 1994; Otto, 2006).

Regional landscape parks thus are functional landscapes which mediate between different use and stakeholder conflicts while also safeguard open space for recreational use and habitat protection. The regional park development represents an informal planning instrument which integrates economic uses in respect to agriculture and forestry with sustainability. A new generation of Parks Paradigm change

5. Discussion

A key characteristic of the Stuttgart region as well as other land scape parks in Germany is the deliberate ignorance of traditional distinctions between urban, suburban and rural zones or existing administrative boundaries. Multiple actor systems not entirely informal act together to guarantee a minimum level of longevity and continuity in terms of communication and support structure (New CityLandscapes, 2001).

6. Conclusions

New concepts and methods for planning the urban realm are necessary. It is suggested that public open space (grey, green and blue) are an essential element in design urban landscapes. The integration of urban development and open space which renders the historical strict division between urbanised and rural obsolete is an emerging new concept that could overcome the antagonistic relationship between nature conservation and economic development that is increasingly criticised by science. The landscape park is one such new concept that combines ecological, social and economic benefits rather than asking for trade-offs in the traditional sense.

Opportunities to use the park metaphor to guide the development and restructuring of city-regions into new types of city landscapes with distinct identities as well as enhanced quality of life with open spaces that offer recreational opportunities as well as ecosystems services. Enhancing potentials of open spaces in cities

The dichotomous perspective of urban versus rural, open space is not helpful as it is bound to create more rather than less conflict in future. Rather than strict preservation, creation and wise management

of natural resources may be a more useful way forward that allows the reconciliation of human needs and environmental values and ecological processes.

7. Acknowledgements

The author is grateful to the interviewees from municipal planning officers who made time to discuss the value of the landscape park.

8. References

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