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Challenges for a shared European countryside of uncertain future. Towards a modern community-based landscape perspective

Bas Pedrolia, Teresa Pinto Correia b and Jørgen Primdahl c

a Land Use Planning Group, Wageningen University, Wageningen, The Netherlands; b Institute of Agricultural Sciences and the Mediterranean Environment, Évora University, Évora, Portugal; c Department of Geosciences and Natural Resource Management, University of Copenhagen, Copenhagen, Denmark

European landscape transitions

Understanding complex change trajectories

A rapid process of change is taking place in European landscapes today (Estel et al., 2015; Pedrolı et al., 2015; Selman, 2012). They are not only changing as a result of processes occurring in agricultural production (intensification/marginalisation, specialisation, concentration), which for centuries has been the function shaping our landscapes. They are also changing because urbanisation means outmigration from rural regions while other functions such as rural residence, outdoor recreation, tourism and nature conservation are also increasingly affecting the dynamics of the landscape, while intersecting with changes in agriculture and forestry (Primdahl, Andersen, Swaffield, & Kristensen, 2013; van Vliet, de Groot, Rietveld, & Verburg, 2015). Such dynamics imply complex trajectories which we have not yet managed to understand. For these reasons, there are concerns how to improve the landscape quality of areas under intensive and specialised farming, while at the same time safeguarding...
and further developing the characteristic diversity in other areas, where agriculture production is of decreasing importance, and where there is high pressure of a range of potentially conflicting functions (Bloemers, Daniels, Fairclough, Pedroli, & Stiles, 2010; Klijn & Vos, 2000; Stanners & Bordeaux, 1995). These concerns entail new challenges in relation to the governance of the European rural landscapes and the involvement of the people concerned—and this is what this paper is about.

**Landscape transitions: unintended side-effects of sectoral policies**

As the functional relationships which shape the landscape in its inherited form and expression have changed virtually everywhere in Europe over the past 50 years (Jongman, 2004; Plieninger & Bieling, 2012), landscape patterns—although lagging behind—will inevitably follow the new functional conditions. While agriculture has become more globalised and market oriented, agricultural practices have become increasingly disconnected from the rural community and thus from rural development. In peri-urban and other landscapes attractive to urbanites, changes in landscape patterns are seen as well. Here functions linked to rural residence, recreation, and conservation (of farm land, water resources, natural habitat, cultural heritage) are gaining prevalence, and tensions emerge as a result of conflicting land use interests between multiple functions and multiple actors, both locals and newcomers, insiders and outsiders.

The dramatic changes which have characterised European landscapes should, first of all, be seen as side-effects of wider socio-economic developments including policy interventions at all levels and in highly different domains. However, the impacts of these policies are limited (van Zanten et al., 2014). The lack of sufficient policy measures to guide sustainable landscape development—not only in rural areas—was exactly why the European Landscape Convention was launched in 2000 (Déjeant-Pons, 2004). A major aim of the Convention was to overcome the unintended side-effects of general socio-economic developments and of many national and EU policies by allowing all those concerned with the landscape to deliberately participate in its protection, management and planning.

To this background, based on literature review and ongoing work on European landscapes (Primdahl, Pinto Correia, & Pedroli, in press) and supplemented by three specific examples from various parts of Europe (Figures 1–3), we identify types of recent transitions in landscapes and discuss possible policy responses. We explore the polarisation processes taking place in the landscape, and discuss the potential of new governance approaches at the local level, safeguarding a living and diverse rural landscape through revitalising the connection between people and their local landscapes. The paper analyses and discusses how place-based governance pathways may cope with the complex issues of land-sharing and community-based landscape development while adapting to global market conditions. We conclude by addressing the question: How can community-based landscape governance cope with current rural landscape transitions?

**The basis of European landscape diversity**

**Transforming the land: a continuous challenge**

The European landscape has never been static. Various periods in history have witnessed the emergence of new governance influences on the landscape. Heterogeneous natural conditions for agriculture and wars, disease, famine, urban—rural relationships and changing climate, have substantially added to the variation in the land use, and thus the landscapes. Despite considerable levelling out of the resulting differentiation in landscapes in the past two centuries (Jepsen et al., 2015), today’s Europe is still largely characterised by landscapes that represent palimpsests of a large number of landscape imprints of several historical layers (Palang, Spek, & Stenseke, 2011).

Generalising the characteristics of today’s diverse European agricultural landscape, it represents first of all a landscape inherited from a period when agriculture was the dominant function underlying landscape management and change. Until 50 years ago, the vast majority of European landscapes were
Figure 1. Landscape strategy for Karby parish, Northern Jutland, Denmark, which was farmed for thousands of years in a mixed farming system, including the extensively grazed salt marshes. During the twentieth century, agriculture became industrialised and concentrated, the salt marshes lost their agricultural function and population declined. (a) A community-based landscape strategy was developed, defining a vision for Karby as a well-functioning village in a sustainable agri-environment (Christensen, Kristensen, & Primdahl, 2012). The strategy was a success and local government decided that this kind of process should be the paradigm for countryside planning in the municipality; (b) Aerial photo of the parish, taken in 2012—today all the salt marshes to the right of the road have been fenced for extensive grazing. Source: Christensen et al. (2012).
inhabited by people who worked in or for farming or forestry (Hoggart, Black, & Buller, 1995, p. 187). Mobility was limited, commuting rare and tourism confined to relatively few cities and coastal resorts. Since late eighteenth century, agriculture and agricultural land use expansion was actively promoted through land reform, agricultural policy and land development programmes.

Figure 2. Midden-Delfland, The Netherlands—a rural community squeezed by metropolitan pressures: (a) Midden-Delfland is a small municipality between Rotterdam and The Hague in the Dutch province of Zuid-Holland. Its core qualities have been successfully preserved such as the openness of the peat meadow landscape, the typical peatland nature, the characteristic allotments and the characteristic system of ditches. (b) Development perspective of the Local Landscape Plan Midden-Delfland, creating a high quality ‘green space’ in an urbanised area of very high density. This LLP was prepared between 2007 and 2009 in cooperation with local and regional stakeholders, including inhabitants and local entrepreneurs and is now being implemented under a binding local public–private cooperation agreement which includes a larger area of green spaces. Source: Slabbers, Koole, Van der Ploeg, & Griffioen (2009).
Figure 3. Serpa, South Portugal—how super intensive olive groves are drastically changing the landscape and hampering rural life. The construction of the nearby Alqueva Dam in the Guadiana river 10 years ago created the largest artificial lake in Europe, which had a profound impact on the local (and regional) landscape, among other things as a consequence of planting irrigated olive groves (Jones, de Graaff, Rodrigo, & Duarte, 2011): (a) Recently planted olive grove in Serpa where once a silvo-pastoral system was placed; (b) Spatial representation of the 2007 olive grove distribution in Serpa. Source: Surová, Pinto-Correia, & Marušák (2014).
A changing urbanisation and globalisation context

Since the Second World War, mobility has increased dramatically along with economic development. Whereas less than half of the European population lived in urban areas in the 1950s, today this is more than 75% (Kabisch & Haase, 2011). Most agricultural landscapes are now also areas for consumption linked with residence and recreation; issues such as nature conservation and cultural heritage can be best understood within this new urban–rural context (Pinto-Correia, McKee, & Guimarães, 2015; Primdahl, Andersen, et al., 2013).

While the non-agricultural functions occurring in the rural landscape have gained importance, farm subsidies have been de-coupled from agricultural production contributing to a de-coupling of agriculture from the rural landscape (Primdahl, 2014). Externally, the urban society implies a challenge for the rural with a mix of demands in the context of a more competitive and globalised food market. Internally, a highly fragmented rural community is at risk of losing control over their own places and the associated landscapes. Within this changing urbanisation and globalisation context, land reform is no longer on the agenda of politicians. Still, the aim of various European Union policies is to frame conditions for land development, for example, through its Common Agricultural Policy (CAP). But also other policy initiatives will affect land use in the coming years, including the zero-land-take policy by 2050 (EC, 2011), renewable energy goals (Klinge Jacobsen, Pade, Schröder, & Kitzing, 2014), the NATURA 2000 network (EC, 2000a) and the Water Framework directive (EC, 2000b).

The vanishing landscapes of intermediate land use intensity

Ongoing polarisation of land use

In the past 40 years land use has become increasingly specialised (van Vliet et al., 2015), and with this a polarisation in Europe is going on, between highly productive intensive farming areas, and on the other hand increasingly marginalised small-scale farm mosaics and extensive land-use systems, or even abandoned land (Estel et al., 2015; Kapfer, Ziesel, & Kantelhardt, 2015; Pinto-Correia & Breman, 2009).

Where favourable biophysical and structural conditions for agriculture exist, agricultural production is often a main driver of land use changes (Primdahl & Swaffield, 2010) (see e.g., Figure 3(a)). Here, landscapes have a rationalised structure, large fields and clear boundaries between different patches. However, the social demand for non-commodity functions related to environmental concerns and to recreation and quality of life has been increasing (Stobbelaar & Pedrol, 2011). These trends have resulted in a new awareness concerning values of the physical landscapes and a social demand for other farming outcomes besides production. This requires the farming sector to compete in a global market and, therefore, to be highly efficient, and at the same time to act in a socially acceptable and environmentally sustainable way, while also creating attractive landscapes for both rural and urban citizens. Especially in peri-urban regions and in attractive rural landscapes, intensive agriculture competes for space with other land uses.

On the other hand, in rural areas with difficult or marginal conditions for industrial farming, agricultural systems did not enter the productivist phase before the end of the twentieth century (Ortiz-Miranda, Moragues-Faus, & Arnalte-Alegre, 2013). This process is, moreover, differentiated depending on the socio-political culture in the countries. Areas with marginal agricultural production are often highly appreciated by society for their natural and cultural heritage values, but also as the basis for recreational and cultural activities, although these are not well integrated in modern farming discourse and ideals (Pinto-Correia & Kristensen, 2013) (see for example, Figure 2(a)). Such additional societal expectations—especially in peri-urban areas—could be the basis for innovative forms of rural management, eventually leading to the emergence of new roles for farming (Barbieri & Valdivia, 2010; Van der Ploeg, 2009). In many remote regions, however, agriculture is characterised by its extensive character. While these are often High Nature Value farming systems with a high societal appreciation, their maintenance is a challenge (Oppermann, Beaufoy, & Herzog, 2012) due to low productivity and modest investments and entrepreneurship.
associated with the farming sector, leading to limited innovation capacity (Pinto-Correia, Menezes, & Barroso, 2014).

**Is medium intensity land use disappearing?**

The medium intensity land use in Europe is characterised by family farming (Davidova & Thomson, 2014). The future of the family farm that has shaped the European landscape to a large extent is far from secured, neither is it certain whether the family farm would guarantee the diversity of the European landscape in the future (Bartoli & De Rosa, 2013). Farm management has, in some cases, attempted to diversify, and the greening of agricultural policies reflects a quest to combine production with environmental protection (see the Karby example, Figure 1). However, the demand for multifunctionality has also overwhelmed agriculture as many of the functions that society expects today from rural areas cannot be provided by a single farm or managed by individual farmers (Domon, 2011; Pinto-Correia & Godinho, 2013; Selman, 2009). Therefore, as is shown in the three examples (Figures 1–3), much of what is going on in the countryside today needs to be understood from outside the farming sector and with a new analytical lens, which facilitates a more realistic view of the processes that are at stake.

**About visions and strategies**

**Land sparing and land sharing**

The polarising trends affecting European rural landscapes discussed above lead, on the one hand, to a segregation of agricultural production landscapes and high-priority nature reserves. It has been argued (Phalan, Onial, Balmford, & Green, 2011) that such developments—conceptualised as ‘land-sparing’ with reference to empirical studies in Ghana—result in the efficient distribution of land both from a food production and a biodiversity perspective. On the other hand, more complex combinations of agricultural activities oriented towards quality production and landscape management may result in landscape patterns which are able to sustain multiple functions, including highly productive agriculture and biodiversity. Such a ‘land-sharing’ model, may be more promising for sustainable rural development than an exclusive ‘land sparing’ perspective (Fischer et al., 2011), especially within a European context where there is a long history of multiple use of rural land.

The generally adopted scenarios for global economic and societal development predict a continuous polarisation of land functions in Europe in the near future (Rounsevell, Ewert, Reginster, Leemans, & Carter, 2005; Verburg, van Berkel, van Doorn, van Eupen, & van den Heiligenberg, 2010). If current trends continue, land sparing seems a much more likely prospect over large parts of Europe than land sharing, possibly with the exception of peri-urban landscapes. Still, a large majority of the visions for future land use expressed in recent stakeholder consultations suggest a considerable degree of multifunctionality (Pérez-Soba, Paterson, & Metzger, 2015; Pinto-Correia, McKee, et al., 2015; Ulled, 2014; van Zanten, Verburg, Koets, & van Beukering, 2014). From a European landscape diversity point of view, the interesting question is, therefore, how policy can promote land sharing.

**Two policy agendas affecting European landscape**

When considering the spatial competences which are directly affecting European landscapes, the following two agendas should be emphasised (Dwyer & Hodge, 2001; Primdahl & Swaffield, 2010): the *market policy agenda*, which has been the key agenda of the European Union from the very start (Cini & Pérez-Solórzan Borragan, 2013); and the *sustainability policy agenda*, which emerged in Europe in the 1970s and became a core issue in the European Union in the mid-1980s (O’Riordan & Voisey, 1998).

The sustainability agenda has become an important policy agenda involving a large number of high level policy-makers in the public debate. It has grown steadily in terms of the number of issues covered
and the significance of the competence. Objectives and regulations are often filtered down through the various levels becoming more and more landscape specific at the low levels.

The market agenda, on the other hand, is highly centralised and most policy decisions are now high-level decisions, usually made at the EU level or in countries outside the EU, but in both cases increasingly compliant with WTO regulations (Sturgess & Dalton, 2000). This agenda is characterised by de-regulation and expanding markets, leaving few competences to local or regional bodies. Agricultural and land market policies are now decided at the EU level for most of Europe. Consequently, the integration of environmental and societal concerns into the market policy agenda can only take place at the higher levels even though the European Treaty prescribes that policy integration must be ensured. Thus, highly globalised technologies and market forces are becoming increasingly influential and the local farmer and the local community are losing autonomy.

The increasing post-war political and economic co-operation has not only removed former market barriers leading to increased competition, it has also removed or levelled out a large number of local and regional policy interventions linked to agriculture and land use. Such developments will inevitably result in pressure on diversity at the local and regional level, as is shown in the example of monoculture olive growing in Serpa in southern Portugal, made possible by irrigation (Figures 3(a) and (b)).

Is there a future for Europe’s landscape diversity?

There is, of course, no easy solution to the challenges described above. More integrated approaches and more local involvement are clearly needed to answer the call—see, for example, Paul Selman (2012)—for reconnection, which should be mainly based on land sharing at a regional scale. Broader and more direct, discursive interactions between landscape management practice, public policy and landscape research (Swaffield, 2013) may also represent a way forward towards workable processes as well as integrated solutions to restructure European landscapes.

Inspired by the work of Albrechts (2006) and Healey (2009), a strategic approach to landscape policy and planning has been found to be promising in a number of experimental projects. Recent experiences have shown that ‘landscape strategy making’ (or ‘spatial strategy making’) approaches are effectively being used for cities and urban regions (Healey, 2006, 2009). But also in the rural landscape promising first experiences involving both the local community (including the farmers and other primary landscape managers) and the local government have been reported (Pinto-Correia, Guiomar, Guerra, & Carvalho-Ribeiro, 2015; Primdahl, 2014; Primdahl, Kristensen, & Busck, 2013) (see also Figures 1 and 2). A landscape strategy-making approach may represent a pathway to a more transformative, more integrated and more sustainable approach to landscape governance in Europe. Landscape strategy making consists of a set of visions and more concrete objectives for protection and change, a number of strategic projects which are more or less comprehensively described, and a spatial outline to which the objectives and projects refer (see, Figure 1(b)—the ‘plan’ of Karby). There is no precise model or framework of how a landscape strategy should be produced, and neither should there be. European landscapes are simply too diverse to apply the same detailed scheme everywhere, while the specific (strategic) context also often varies in scale and substance. Healey (2009) mentions four dimensions which we consider applicable in landscape strategy making: (1) creating attention/common interest in the landscape in question; (2) evaluating the landscape and formulating objectives; (3) mobilising ideas and knowledge concerning future developments; and (4) framing the strategy in appealing ways and identifying strategic projects such as walking trails, major restoration projects, land consolidation projects, grassland management projects, etc. This has been realised both in Karby (Figure 1(b)) and in Midden-Delfland (Figure 2(b)). Broad ownership of the strategy is required, including local government, land owners, local businesses, residents, NGOs, relevant institutions and organisations (Van Paassen, Van den Berg, Steingrover, Werkman, & Pedrolí, 2011).

Europe’s landscape diversity may still survive for some time because there is a time lag between changes to landscape functions and transitions in landscape character and diversity (van der Sluis, Pedrolí, Kristensen, Cosor, & Pavlis, 2015). However, current policies seem to be neglecting the long-term
effects of land use change that may very well be irreversible once they have become observable. Therefore, the need for new paradigms for the governance of rural landscapes of Europe is urgent. The cases described above show that the engagement of the local community can be re-activated at the landscape level and that it can responsibly be involved in shared and binding decisions. To cope with current rural landscape transitions, modern community-based landscape governance should invest in joint vision development among all parties concerned, paying due attention to integrating sectoral interests, to shared funding opportunities, to innovative multifunctional land management alternatives and to a proper use of available resources, including knowledge.

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