Belgeo

Revue belge de géographie

2-3 | 2004

Landscape research in Europe

Editorial: Landscape research in Europe

La recherche sur les paysages en Europe

Marc Antrop

Electronic version

URL: <http://journals.openedition.org/belgeo/13796>

DOI: 10.4000/belgeo.13796

ISSN: 2294-9135

Publisher:

National Committee of Geography of Belgium, Société Royale Belge de Géographie

Printed version

Date of publication: 30 September 2004

Number of pages: 199-208

ISSN: 1377-2368

Electronic reference

Marc Antrop, « Editorial: Landscape research in Europe », *Belgeo* [Online], 2-3 | 2004, Online since 14 September 2013, connection on 24 September 2020. URL : <http://journals.openedition.org/belgeo/13796> ; DOI : <https://doi.org/10.4000/belgeo.13796>

This text was automatically generated on 24 September 2020.

Belgeo est mis à disposition selon les termes de la licence Creative Commons Attribution 4.0 International.

Editorial: Landscape research in Europe

La recherche sur les paysages en Europe

Marc Antrop

Introduction

- 1 About two years ago, during discussions with colleagues at the European meetings of the International Association for Landscape Ecology and the Permanent Conference for the Study of the Rural Landscape, the idea grew to make an overview of what was going on in the field of landscape research in Europe. Although researchers themselves had many personal contacts and the same, rather small group of researchers saw each other regularly at the many meetings dealing with landscape studies, an overview of what was going on in each country was not clear at all. When I was asked to prepare a special issue about «landscape» for the journal BELGEO, it was obvious to try to make an overview of the recent work on landscape research in Europe. The concept was to obtain a condensed but comprehensive overview of status of the current landscape research in European countries as seen by practitioners. I contacted colleagues in 20 European countries asking them to write a brief state of the art of six to ten pages about the landscape research in their country. All were stimulated to cooperate with colleagues in landscape research in the broadest sense to try to make a synthesis. Knowing that the history, background and actual situation of landscape research is very different in each country, a rather loose structure for the articles had to be adopted. It was asked to address at least following issues if possible and appropriate:

- Fields of landscape research: In what domains is there active research and application of landscape science? (fundamental research, applied, planning, human/social or natural...).
- Disciplines involved: Who is involved in landscape research? What disciplines, which one is leading; what institutions (public, private, educational, research, etc.). Describe the relationship between geography, ecology, planning, landscape architecture etc. and how these disciplines eventually interact.

- Landscapes types and regions: What are your (personal) landscape types map of your country? The purpose is to see how these fit across the borders by comparing the different maps. It was not necessary to give detailed descriptions of landscape type; summarize them in a table with their common names and main characteristics.
 - Stages of landscape development: a table of the important historical phases of landscape history in your country, which define main landscape types. For example: from when to when do prehistoric landscapes occur? When does Christianity start to influence landscape development? When does Industrialization start to affect the landscapes?
 - What are actual important values, potentials, threats, etc. of landscapes in your country and possible future development?
 - A recent and as complete as possible list of references about landscape research in your country.
- 2 All were interested to participate, but unfortunately several were not able to submit in time their manuscript because of the increasing demands each of them had by other professional tasks and obligations. There is a lot going on in the field of landscape research and all colleagues are indeed in many cases deeply involved in applied policy supporting research, which diffuses more slowly in international publications. It showed also that the community of landscape researchers is too small to handle the increasing demands on landscape issues nowadays. The final deadline was October 2003 and 15 articles were submitted and processed. This special issue presents the situation in 15 European countries, from the North to the South and from the East to the West of Europe.

The research is as diverse as the landscapes

- 3 In the federal state *Belgium*, landscape research evolved from regional geographical monographs to more applied research that focuses upon the specific problems in each of the regions and resulted in different landscape typologies. Landscape research involved traditionally historical and regional geographers (Antrop, 2000). More interdisciplinary studies involving geographers, historians, archaeologists, agronomists, foresters, ecologists and nature conservationists are becoming more general and applications are becoming oriented to spatial and environmental planning.
- 4 Landscape research in *Denmark* was based upon approaches in geology, geography, biology, and spatial planning, and focussed upon rural geography, agricultural landscapes and landscape ecology. During the 1990s landscape research blossomed and became transdisciplinary research involving several institutions.
- 5 Landscape research in *Estonia* is limited to the twentieth century and started in University of Tartu with J. G. Granö (Granö, 2003). Although the German systematic and scientific approach to study the landscape was dominant since, many interactions with disciplines from both the natural and social sciences, as well as the humanities developed recently as well as applied studies.
- 6 Landscape research in *Finland* is based upon a long methodological traditions stretching back to the early 20th century. Finnish landscape studies address four main themes: (1) theoretical and methodological, (2) ecological, (3) social and cultural, and (4) applied. The focus of Finnish landscape research has been on both physical landscape

characteristics and their spatial and temporal interactions, and also on the diverse social context of landscapes.

- 7 Landscape research in *France* developed between the two World Wars both in geography and history and deals only with the rural landscape and is based upon regional monographs according to the school of Vidal de la Blache. This kind of landscape studies ends in the 1960s and new developments emerge in the 1970s. One is the introduction of spatial analysis and GIS in particular by geographers. Others are more conceptual approaches based upon the visual landscape characteristics, and one based upon landscape ecology. Recently historians and also archaeologists regained interest in the study of the landscape, as well policy-makers and public interest groups.
- 8 Landscape research has a long tradition in *Germany* and is based upon the work of von Humboldt, Troll, Paffen, Schmithüsen and Neef. During the 1960s to 1980s, landscape research became marginalized compared to new developments in geography. Stimulated by the development of landscape ecology and the need for applications in spatial and environmental planning, landscape research became important again, more transdisciplinary and focussing upon domains of landscape diagnosis, evaluations and the development of holistic Leitbilder.
- 9 In *Greece*, landscape science is still poorly developed and the Greek landscape studies were little based upon foreign examples, such as the work of Phillipson (1959) and Rackham (1969). In the 1990s, landscape science in Greece gradually and slowly underwent a shift from the fragmentary practices of design sciences to a more concerted, interdisciplinary and systematic landscape approach.
- 10 In *Hungary* landscape studies have a long tradition in geography, focussing upon regional synthesis, landscape history, geo-ecological mapping and urban ecology. More recently there is also a shift towards more applied research related to environmental and resources management, risk assessment and landscape restoration.
- 11 *Ireland* offers many and detailed studies of the landscape from the historical geographical perspective, which is summarised in the impressive and exemplary synthesis of the Atlas of the Irish Rural Landscape edited by Aalen, Whelan and Stout (1997). In her contribution, Annagret Simms offers a detailed development of the landscape research in historical geography and demonstrates the importance of this knowledge for the future development of the Irish landscapes.
- 12 Former work in landscape research in *Poland*, focussed the definition and description of landscape types and regional classifications based upon the combination natural and socio-economic conditions. Recent research is more stimulated by landscape ecology and focuses upon more interdisciplinary applications in landscape conservation and planning.
- 13 In *Portugal*, landscape studies were few and dispersed. An important stimulant to landscape research was the creation in 1999 of the Portuguese Society of Landscape Ecology, as a chapter of the International Association for Landscape Ecology, grouping scientists from very different disciplines, such as landscape architecture, biology, agronomy, forestry, geography and environmental sciences. In a joint research programme they were able to realise in a quick and efficient way the identification and characterisation of landscape areas for the whole of the country fitting into the recent international (European) policy according to landscapes.

- 14 In *Slovakia* landscape research has also a long tradition and played a pioneering role in the development of modern landscape science and its applications. The traditional approach was based upon the French regional geography and the study of the cultural landscape as holistic synthesis of natural base, economic orientation and social environment. In the second half of the 20th century landscape research was influenced by development of natural analytical sciences and the competition between scientific disciplines, in particular geography and ecology. Concepts of landscape synthesis, geosystemic approach and geoecology were introduced. Important were the applications in landscape-ecological planning, which resulted in the LANDEP methodology. Slovakia was the first country where environmental impact assessment in a landscape ecological perspective was legally implemented in the planning policy.
- 15 In *Slovenia*, geography plays the leading role in fundamental landscape research, recently expressed by the first national atlas with much attention for landscape regions and types and a special focus on karst landscapes. The important and fast political and economic changes caused also increasingly important landscape changes. Thus, landscape science faces new challenges in the more transdisciplinary and applied research.

Recent developments

- 16 The *Permanent Conference on the Study of the Rural Landscape* (PECSRL)¹ holds since 1957 the oldest tradition of a scientific meeting very two years devoted to the landscape in Europe (Helmfrid, 2004). Initially, it consisted mainly of historical geographers, but at the last meeting held in Tartu (Estonia) in 2002 the participating disciplines broadened significantly, including landscape ecologists, social scientists, rural planners, landscape architects, human geographers, physical geographers, historians, and archaeologists. Many participants were both involved in fundamental research but increasingly also in applied research for landscape management or heritage conservation.
- 17 The *Werkgemeenschap Landschapsecologisch Onderzoek* (WLO)² was created in The Netherlands in 1972. It developed a large and interdisciplinary community of researchers and practitioners dealing with very different aspects of the landscape in a renewed landscape ecological perspective (Zonneveld, 2000). In 1980 a workgroup «Landscape Synthesis» was established within the International Geographical Union (IGU), grouping mainly geographers and ecologists from different European schools, with a very important contribution of Central-European tradition of landscape research. Contacts between both working groups stimulated the «rebirth» landscape ecology and initiated the Veldhoven meeting in 1982 organised by the WLO (Tsjallingii and de Veer, 1982), resulting in the creation of the International Association of Landscape Ecology (IALE³) in 1982 and the definite internationalisation of landscape ecology. IALE organises a world congress every four years, but in between national chapters organise conferences on a regional basis. Amongst the older members several are active both in PECSRL, the WLO and IALE, but this is a minority. In 1999 the IGU working group «Landscape Synthesis» ceased to exist and was integrated within IALE (Moss and Milne, 1999).
- 18 The first assessment of Europe's environment by the EEA (the *Dobris Assessment*) in 1995 (Stanners and Bourdeau, 1995⁴) was an important momentum. The chapter 8 was devoted to the landscape and landscape aspects were also included in the chapters

dealing with nature and wildlife, the urban environment, agriculture, forestry, tourism and recreation, transport and coastal zone management. An important assertion was related to the values and function of the landscape with the conclusion that «the particular richness and diversity of European landscapes, the visitors this attracts from within and outside Europe, combined with their many cultural associations makes landscapes a matter of interest and concern to all. Ultimately the regional diversity and uniqueness of landscapes form collectively a common European heritage» (Stanners and Bourdeau, 1995, p. 173). The pressures and threats on the landscapes are discussed and actions to prevent further loss of landscape qualities are proposed, many of which are found again in the measures proposed in the European Landscape Convention. A first classification of the landscape types of Europe is presented based upon the «The Major Landscapes of Europe» of Meeus (1995), which describes 30 landscape types grouped into eight categories. This map was also incorporated in the GISCO Database of Eurostat as a Landscape layer LS⁵ in the theme Natural Resources on scale 1:25000000. However, it is interesting to note that this special attention for the landscape in the Dobris Assessment disappeared completely in the second assessment of Europe's environment.

- 19 The Council of Europe made an important next step with the *European Landscape Convention*⁶, which was opened for signature in 2000. Although it has a little legal power (Van Hoorick, 2002), it certainly stimulated to focus policy upon the landscape issues. The actual status of signing and ratification of the convention by the member states of the Council of Europe is given in Table 1. Again, it should be noticed that countries with a long tradition in landscape research and many activities did not sign the treaty yet.
- 20 The increasing rapid, large scale and devastating changes in the European landscapes initiated the last decades a boom of many parallel initiatives and activities, both on the national as international level. The landscape was put on the political agenda. The activities cluster in upon following groups: (1) landscape inventorying and classification, (2) landscape evaluation and assessment, (3) landscapes in the context of heritage conservation, (4) inter- and transdisciplinary research, often linked to monitoring of changes.
- 21 Early, important and still unique examples of landscape research and its integration in policy-making are found in the Slovakia and in the United Kingdom. In Slovakia the development of the LANDEP methodology (Ruzicka and Miklós, 1982) was an important step to integrate landscape ecology into the planning and land management practices. It resulted in a territorial system of ecological stability (TSES), which was already legally implemented in 1992 and offered important contributions to the sustainable development and environmental impact assessment (Izakovicová *et al.*, 1997).
- 22 The British *Countryside Survey 2000* (CS2000)⁷ is a major audit of the countryside, involving detailed field observations in a random sample of 1 km grid squares and satellite imagery Land Cover Map 2000 (LCM2000) providing a complete land cover census for Great Britain and Northern Ireland. Data were collected about habitat types, hedgerows, plant species and freshwater. Many of the sample sites were visited in 1978, 1984 and 1990 providing a time series of changes in the countryside. The main fieldwork and satellite image capture were carried out in 1998 and 1999 and the results from CS2000 have now been published. The information is made widely available on the Countryside Information System (CIS). The CS2000 offers sound scientific information to be used in spatial planning, landscape management and monitoring. The *Countryside*

*Agency*⁸ is a governmental agency that was established in 1999 to conserve and enhance England's countryside and to spread social and economic opportunities for the people living there. The Landscape Character Assessment (LCA) was developed as a tool to sustain decision-making and improve communication between all stakeholders involved. The *Countryside Character Network* (CCN)⁹ is an informal network set up in 1999 by the Countryside Agency as a place where people interested in landscape character assessment and related initiatives exchange ideas and experiences. It is open to anyone: policy makers, communities, businesses, researchers and academics.

- 23 *Landscape Europe*¹⁰ is a partnership from Alterra Green World Research with other institutes and expert groups active in landscape research and management. Activities cover research and education in areas of culture, aesthetics, biodiversity and sustainable land use. Associated with Landscape Europe is the Pan-European Forum for Countryside and Landscape Monitoring (ECOLAND¹¹), which seeks to create a European co-ordinated structure for monitoring the change in habitats and biodiversity and the associated causes and impacts on the landscape. Another initiative co-ordinated by Landscape Europe is the European Landscape Character Assessment Initiative (ELCAI)¹², which aims to create a reference base and standards for implementing landscape-related policies at the European level and using landscape character assessment and landscape indicators for linking regional/ national bottom-up approaches with European top-down policy. The objectives include the realisation of an European landscape typology and map (Mücher *et al.*, 2003).

Table 1. Signature and ratification of the European Landscape Convention, status 25 August 2004.

Country	Date of signature	Date of ratification	Date of entry into force
Albania			
Andorra			
Armenia	14/05/2003	23/03/2004	1/07/2004
Austria			
Azerbaijan	22/10/2003		
Belgium	20/10/2000		
Bosnia and Herzegovina			
Bulgaria	20/10/2000		
Croatia	20/10/2000	15/01/2003	1/03/2004
Cyprus	21/11/2001		
Czech Republic	28/11/2002	3/06/2004	1/10/2004
Denmark	20/10/2000	20/03/2003	1/03/2004
Estonia			
Finland	20/10/2000		
France	20/10/2000		
Georgia			
Germany			
Greece	13/12/2000		
Hungary			
Iceland			
Ireland	22/03/2002	22/03/2002	1/03/2004
Italy	20/10/2000		
Latvia			
Liechtenstein			
Lithuania	20/10/2000	13/11/2002	1/03/2004
Luxembourg	20/10/2000		
Malta	20/10/2000		
Moldova	20/10/2000	14/03/2002	1/03/2004
Netherlands			
Norway	20/10/2000	23/10/2001	1/03/2004
Poland	21/12/2001		
Portugal	20/10/2000		
Romania	20/10/2000	7/11/2002	1/03/2004
Russia			
San Marino	20/10/2000	26/11/2003	1/03/2004
Serbia and Montenegro			
Slovakia			
Slovenia	7/03/2001	25/09/2003	1/03/2004
Spain	20/10/2000		
Sweden	22/02/2001		
Switzerland	20/10/2000		
the former Yugoslav Republic of Macedonia	15/01/2003	18/11/2003	1/03/2004
Turkey	20/10/2000	13/10/2003	1/03/2004
Ukraine	17/06/2004		
United Kingdom			

- 24 *Pathways to Cultural Landscapes*¹³ is a partnership of public and private institutions, which care for the cultural landscapes in Europe, and is funded by the programme Culture 2000 of the European Union. It groups 12 national projects across Europe and

the partners are mainly active in heritage conservation and archaeology in the cultural landscape. An important aim is to inform and support decision-makers and awareness rising by the broad public. Finally, it should be noticed that much of the applied research about the landscapes is policy and management oriented and most of the results is published through the internet¹⁴.

Conclusions

- 25 Landscape research in Europe evolved from regional monographic studies by geographers and historians in the first half of the 20th century towards an inter- and transdisciplinary applied research at the end of the 20th century that is mainly problem- and planning oriented. The actual revival of landscape research is conditioned by the rapid and important changes in our environmental and society causing important losses in natural and cultural qualities and stimulated by international policy and institutional bodies. Landscapes are being put on the political agenda and new scientific sound information is needed for policy-makers at local, regional national and European scale. Although there is a lot of similarity between the approaches between the many initiatives that are going on and there are many platforms where landscape researchers regularly meet, much of the landscape research still must be considered as fragmented and little co-ordinated. The lack of a solid and generally accepted theoretical and methodological background is an important factor in this issue and is caused by the focus upon often short term and strictly policy-supporting research and less fundamental research in this domain.

BIBLIOGRAPHY

- AALLEN F.H.A., WHELAN K. & STOUT M. (eds.) (1997), *Atlas of the Irish Rural Landscape*, Cork University Press, Cork, 352 p.
- ANTROP M., (2000), «Geography and landscape science», *Belgeo*, special issue, 29th Intern. Geographical Congress, 1-4, pp. 9-35.
- GRANÖ O. (ed.) (2003), *Origin of Landscape Science. J.G.Granö and a New Pure Geography for a New State*, The Turku University Foundation, Turku, 143 p.
- HELMFRID S. (2004), «The Permanent Conference and the Study of the Rural Landscape», in PALANG H., SOOVÄLI H., ANTROP M. & SETTEN S. (eds.) (2004), *European rural landscapes: persistence and change in a globalising environment*, Kluwer Academic Publishers, pp. 467-482.
- IZAKOVICOVÁ Z., MIKLÓS L. & DRDOŠ J. (1997), *Landscape-ecological condition of sustainable development*, VEDA Bratislava, 183 p.
- KLIJN J. & VOS W. (eds.) (2000), *From Landscape Ecology to Landscape Science*, WLO, Wageningen, Kluwer Academic Publ., 162 p.

- MANDER U. & ANTROP M. (eds.) (2003), *Multifunctional Landscapes Vol. 3: Continuity and Change*, Southampton, WIT Press.
- MEEUS J.H.A. (1995), «Pan-European landscapes», *Landscape and Urban Planning*, 31, pp. 57-79.
- MOSS M.R. & MILNE R.J. (eds.) (1999), *Landscape Synthesis. Concepts and Applications. Landscape System Analysis in Environment Management*, Working Group of the International Association for Landscape Ecology.
- MÜCHER C.A., BUNCE R.G.H., JONGMAN R.H.G., KLIJN J.A., KOOMEN A.J.M., METZGER M.J. & WASCHER D.M. (2003), *Identification and characterization of environments and landscapes in Europe*, Alterra - rapport 832, Wageningen, 119 p.
- PALANG H. & FRY G. (2003), *Landscape Interfaces. Cultural heritage in changing landscapes*, Kluwer Academic Publishers, Dordrecht.
- PHILIPPSON A. (1959), *Die Griechischen Landschaften*, Frankfurt am Main, V. Klostermann.
- RACKHAM O. & MOODY J. (1996), *The making of the Cretan landscape*, Manchester University Press, Manchester.
- RUZICKA M. & MIKLÓS L. (1982), «Landscape-ecological planning (LANDEP) in the process of territorial planning», *Ekológia (ĚSSR)*, 1, 3, pp. 297-312.
- STANNERS D. & BOURDEAU Ph. (eds.) (1995), *Europe's Environment. The Dobris Assessment*. European Environment Agency, EC DG XI and Phare, Copenhagen, p. 676.
- TSJALLINGII S.P. and DE VEER A.A. (1982), *Perspectives in Landscape Ecology*, Centre for Agricultural Publishing and Documentation, Wageningen.
- VAN HOORICK G. (2002), «Het behoud van het ruraal erfgoed vanuit Europees perspectief», *Leefmilieu*, 25, 2, pp. 37- 42.
- ZONNEVELD I.S. (2000), «Count your blessings? Twenty-five years of landscape ecology», in KLIJN J. & VOS W. (eds.), *From Landscape Ecology to Landscape Science*, WLO, Wageningen, Kluwer Academic Publ., pp. 30-42.

NOTES

1. <http://www.pecsrl.org/>
2. <http://www.landschap.nl/>
3. <http://www.wetlands.org/iale/>
4. <http://reports.eea.eu.int/92-826-5409-5/en>
5. <http://data-dist.jrc.it/eu4u/metadata/nrls.htm>
6. <http://conventions.coe.int/Treaty/EN/cadreprincipal.htm>
7. <http://www.cs2000.org.uk/>
8. <http://www.countryside.gov.uk/>
9. <http://www.ccnetwork.org.uk/index.htm>
10. <http://www.alterra-research.nl/pls/portal30/docs/FOLDER/LANDSCAPEEUROPE/LANDSCAPEEUROPE/INDEX.HTM>
11. <http://www.landscape-europe.net/index.php/activities/monitoring/40-monitoring?start=1>
12. <http://www.elcai.org>
13. <http://www.pcl-eu.de/indexen.php>
14. Good examples are:
<http://www.meetnetlandschap.nl/>

http://www.nijos.no/English/index_e.htm

http://web.gisvlaanderen.be/gis/downloads/Fol_land.pdf

http://www.countryside.gov.uk/LivingLandscapes/countryside_character/landscape/publication/ref.asp

ABSTRACTS

This article is an editorial introduction to the issue of BELGEO devoted to landscape research in Europe. The issue is a collection of the status of landscape research in fourteen countries addressing questions related to the domains of research (fundamental, applied), the disciplines involved, the landscape types and regions considered important, the stages of landscape development during history, actual problems and potentials of the landscape and important references. This issue does not cover all countries in Europe and the ones that are missing are remarkably countries where a long tradition in landscape research exists and where many activities are going on. Making a state of the art is difficult because of too many activities. The general conclusion is that the status and organisation of landscape research in the European countries is as diverse as the landscapes. A common characteristic is the increase in activities on both the national as international scenes and a shift from fundamental research towards applied and transdisciplinary research; an evolution which is clearly linked with the growing interest in landscape management and conservation by authorities and policy-makers, as a response to the increasingly rapid and vast changes affecting landscapes. A brief overview is given of different international initiatives that are underway in Europe; most of these actions are parallel and still not well concerted.

Cet article est un éditorial pour le numéro de BELGEO consacré à la recherche sur les paysages en Europe. Il dresse l'état des lieux de cette recherche dans quatorze pays européens par rapport à des thèmes tels que les types de recherche (fondamentale, appliquée), les disciplines impliquées, les types de paysages et régions considérés comme importants, les phases essentielles du développement paysager au cours de l'histoire, les problèmes et les potentiels actuels, ainsi que les références majeures. Cet aperçu reste néanmoins incomplet puisqu'un certain nombre de pays, où existe pourtant une longue tradition dans l'étude du paysage, ont déclaré forfait, sans doute par manque de temps ou de coordination entre leur grand nombre de chercheurs et activités très intenses. La conclusion générale est que la diversité dans l'étude du paysage au niveau national reflète la diversité paysagère en Europe. Pourtant, presque partout l'intérêt pour le paysage s'est développé ces dernières décennies et on remarque une transition de la recherche fondamentale vers la recherche appliquée et transdisciplinaire. Ceci montre aussi l'intérêt accru pour des questions de plus en plus importantes concernant la conservation du patrimoine paysager, tant naturel que culturel, ou pour l'aménagement paysager par les autorités et le public en général. Enfin, un bref aperçu est donné des différentes initiatives internationales en cours, dont la plupart suivent encore des pistes parallèles et sont peu coordonnées.

INDEX

Mots-clés: recherche sur les paysages, Europe, XXe siècle

Keywords: landscape research, Europe, 20th century

AUTHOR

MARC ANTROP

Ghent University, Belgium, marc.antrop@ugent.be