

Historical Geography

— An Environmental Historical Bridge between History and Geography

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Time and space are primal constituents of life. They both determine human existence as well as social and governmental structures. As a result, geographical research always entails a temporal dimension (DENECKE & FEHN 1989; BAKER 2003). Within that part of geography that deals with the spatial aspects of human existence (human geography or “Anthropogeographie”), three fields of research have been emerged. These link the temporal to the spatial dimension:

- Historical geography studies human activities and resulting spatial structures in historical perspective in order to deduce laws of temporal-spatial differentiation. This requires describing, differentiating and explaining the scale and quality of economic, social, political, demographic and natural processes. It also includes the reconstruction of past landscapes (JÄGER 1994).
- Genetic cultural landscape research seeks to explain present spatial structures and processes in terms of the past. It centres on humans as agents of landscape development and recedes back into history as far as connections between the past and the present exist. The human impact on landscape is most discernible in settlements and their surroundings (e.g. BORK & SCHENK 2002; BORK & LANG 2003).
- Applied historical geography aims to implement the results of the branches mentioned above in regional planning and environmental education. If sustainable development takes centre stage, it is called cultural landscape conservation (SCHENK et al. 1997; UNESCO 2003).

If all three aspects are considered, most people speak of the “historical-genetical” approach in geography. However, this term is rather idealistic, as in fact most geographers define themselves by their methodical approach (e.g. as geomorphologists) or their socialisation within one of the manifold subdisciplines in the field (e.g. as social geographers), even if their questions are “historical-genetical”. Even those, who define themselves as historical geographers, cannot and do not want to pursue historical geography exclusively. In practise, they are integrated into the curriculum of their departments, which entails a certain breadth in research as well.

What is meant by *historical geography* is defined by the cross-sectional character of the “historical-genetical” approach, which intends to analyse spatial structures *and* spatially oriented patterns of behaviour. Consequently, historical geography does always contribute to environmental issues as well. Its principal objectives lie in

- fundamental research, since “historical-genetical” research reveals the background and causes of economic, social, demographic, mental and ecological processes and conditions. This leads to the geographical fundamentals of history. Another aim is to enlarge the period under consider-

ation in order to get new insights that contribute to the understanding of natural and human developments.

- contributions towards environmental education that show the history of our *environment and demonstrate that it has changed and is still changing*. “Historical-genetical” research, as every other historical research, seeks to reveal historical mistakes and aberrations in order to avoid them in the future.
- applied studies and active cooperation in planning processes to protect the cultural heritage in our landscapes and to emphasise its potentials for future development. This includes aspects like biological and cultural diversity, regional identity or aesthetical quality. In this context, administrative provisions serve as starting points for the formulation of concepts of development and protection.

Questions posed by historical geography and environmental history are quite similar (JÄGER 1994; SIMMONS 1993), though geography highlights aspects of landscape change more strongly. This also distinguishes historical geography from regional history, although the latter carries out investigations on a mid-scale level as well. Furthermore, the history of the discipline demonstrates that historical geography is a subdisciplin of geography in spite of its proximity to history.

From the reconstruction of ancient battle fields to applied historical geography

The objectives and priorities of historical geography have changed several times. Up to the beginning of the 20th century, historical geographers intended to reconstruct ancient battle fields. The missions of Alexander the Great have been a traditional subject, and at some Israeli departments geographical approaches to the bible are still very important. As there is no relation to the present, proponents of this branch of historical geography count themselves to the discipline of history (SONNABEND 1999).

Since the time of Otto Schlüter (1872-1959) and Robert Gradmann (1865-1950) – the precursors of historical geography in Germany – many academics have been concerned with historical settlement research or processes of cultural landscape development, especially in regional studies. Here, two strands of development have been emphasised: processes of colonisation and processes of settlement desertion.

Research on the large-scale abandonment of settlements at the end of the middle ages led to the notion that settlement processes do not proceed linearly (HELMIG et al. 2002). This means that the possibilities to infer knowledge about the past from younger circumstances are very limited (BERGMANN 1993). However, this was exactly what research did about 1900. At that time, it was the common objective to trace back spatial structures as far as possible in order to substantiate ethnic continuities in the settlement system. This type of research was obliged to a traditional concept of landscape, it was bound to the object and largely morphographic. Its close relationship to the concept of cultural landscape development led to various typologies, which are used to describe and explain the developmental processes of field or settlement layout, often in terms of distribution maps (BECKER 1998).

Until the end of the 1960s, when early social geographers as well as applied geographers began to

criticise it for being unscientific, the “historical-genetical” approach remained at the core of geography. At that time, many geographers turned to new questions and fields of research. Several chairs of “historical-genetical” geography were changed into those of spatial planning or economic and social geography. In the former DDR, where geography was primarily concerned with planning issues, historical geography has been completely marginalised (FEHN et al. 1988).

An international forum for the remaining historical geographers has been the “Permanent European Conference for the Study of the Rural Landscape”, which holds its meetings every two years since its foundation in 1957 (NITZ 1992; FEHN 1998). Since 1974 the “Working Group for Genetic Settlement Research in Central Europe” (“Arbeitskreis für Genetische Siedlungsforschung in Mitteleuropa”) organises annual and thematic conferences mainly for archaeologists, settlement historians and geographers from the German-speaking part of Europe (journal “Siedlungsforschung”). As a result of its interdisciplinary orientation towards settlement geography and archaeology, historical geography partially separated itself from new approaches within human geography (FEHN 1975ff.). In Germany, historical geography developed its own approach, field of research and organisation. This is why important developments within the historical geographical research of the last 25 years have often been overlooked from the outside. Most frequently it has been ignored that modern “historical-genetical” research is conceived as process analysis, which centres on social groups as actors and on questions of environmental history (DENECKE 1994).

In Germany, the development of cultural landscape management started from the morphogenetic perspective, which is in contrast to the Anglo-American situation, where historical geography is characterised by its social and economic approaches. The development of application-oriented research and training was stimulated by influences from Dutch and Swiss historical geographers. In this context, the department of historical geography at Bonn served as a focal point for many activities (KLEEFELD & BURGGRAAFF 1997). These activities were bundled in the “Working group for Applied Historical Geography” (“Arbeitsgruppe für Angewandte Historische Geographie”), which is affiliated to the Group for Genetic Settlement Research.

In sum, two developmental trends of historical-geographical research in Central Europe are noticeable:

- Since the 1960s, historical geography developed parallel to geography. This development was characterised by a continuous accent on the morphogenetic approach. In terms of its thematic and institutional organisation historical geography was not only geared to geography, but also to settlement archaeology and settlement history. Consequently, historical geography was not fully integrated neither into the overall development of geography or environmental history in Germany nor into the development of Anglo-American historical geography.
- Applied historical geography is a characteristic of Central European geography. It emerged from the morphogenetic approach.

Sources and methods of analysis

Historical-genetical geography is a discipline between humanities and sciences. It gains its knowledge from three different types of sources: from written documents and cartographic sources, from

the landscape itself and from data obtained by scientific methods.

Interpretation of written accounts, cartographic sources and pictorial evidence

Evidence of past landscapes can be drawn from the interpretation of different types of written and cartographic documents. Important sources for environmental history are manorial registers of property ownership or rights with different regional names (e.g. Urbare, Lehn- and Salbücher), tax registers and bills as well as ministerial files (e.g. privy councils, forest administration, building commission). Documents that derived from conflicts are particularly valuable, because they often regulated access and utilisation of spatial resources such as soils, waters or forests. However, arguably none of these sources has been written to pass on environmental information. As in every other historical discipline, it is the task of the historical geographer to critically interpret and acquire this information. Most sources do provide information which is limited to a local or regional scale. Furthermore, the data can only be understood against the backdrop of the very specific context in which it was written. Hence, increased efforts are necessary to build up “long rows” in order to detect large-scale trends in a comparative perspective. Homogeneous and quantifiable rows of data can be compiled from archival files, e.g. bills (SCHENK 1999). For that purpose it is necessary to extract quantitative information such as frequencies of occurrence, hierarchical grades and codifications in order to build up groups, periods and rankings statistically. Computers offer the possibility to set up historical environmental databases. Meanwhile a multitude of procedures including approved catalogues of criteria and questions has been developed (GLASER 1996, 2001). Such databases provide good starting points for objective comparisons, e.g. to reconstruct past climates. Their adoption makes it possible to detect breaks and continuities in certain developments. Nevertheless, in many cases area-wide information is missing. Moreover, it is often impossible to go back much further than the high Middle Ages. Thus it is required to analyse a preferably great number of different sources of diverse quality and temporal coverage in a combined manner.

Historical geography uses, as geography in general, maps as both sources of knowledge and means of communication (SCHÖNFELDER 1999). Therefore two different types of maps have to be distinguished: (1) old maps (hand drawn plans and sketches, early official surveys such as first cadastral maps, so-called *Urkataster*) as sources and (2) historical maps, which are used to illustrate facts and results. In research and teaching both types of maps are closely related, since old maps are not primarily addressed from an historical-cartographical perspective, but as an important source which allows the reconstruction and illustration of past landscapes. The map of cultural landscape changes aims to display the succession of multiple maps in different cross-sections so that several phases of the cultural landscape development are merged in a single map sheet (BURGGRAFF & KLEEFELD 1998). It bases on the method of backtracking: The combined interpretation of cadastral maps of the 19th century and manorial registers of early modern times allows a step-by-step approach to prior stages of field and settlement layouts. In this instance the names of sites and places are important sources of information (meadows, forests and waters). Furthermore settlement places are linguistic entities, which are important sources for the history of the landscape, namely because of

- the spatial clustering of certain types of settlement names, which can have different causes, e.g.

geographical, historical, linguistic, social and ethnic, among others;

- the typology of the names, which frequently relates to their meaning (e.g. “Rotacker”/red field as a name for the colour of the soil or the type of clearing);
- the temporal stratification of the names, particularly in regard to their endings. In certain periods some suffixes appear to have been in vogue, e.g. -ingen or -heim in the early medieval settlement phases of south-west Germany.

The history of art tells us that landscape paintings have been emanated from the poetical mind of the painter (Goethe). Yet landscape paintings include references to reality. Thus, if art historical source criticism is kept in mind, they are suited to illustrate past landscape. Under very favourable conditions it is even possible draw information of landscape conditions (e.g. the state of glaciers in the Alps) from them. Photographs may be used to infer information on more recent landscapes.

Landscape as archive

For the historical geographer, the cultural landscape is a book written over thousands of years by hundreds of generations. It is like a palimpsest with all the relevant information on past environments. Who conceives landscapes as archives will find several elements and structures of the past in it. If they exist up to the present-day, often without any function and therefore devoid of context, they are called relicts. The addition of the word “historical” means that these elements cannot be erected any more. Some of them, like ridge and furrow systems, have been purposely created. Many others are the rather coincident result of human actions. The same holds true for their current ecological effects and significance (e.g. sunken tracks).

The notion that human actions affect the relief led to the term “human variance”, which is parallel to the term of “climate variance”. The anthropogenic geomorphology and soil science is concerned with the formation and ecological consequences of the “inventory of quasi-natural features” (BORK 1998). One prominent field of research are forest clearings and their effects on the landscape, particularly in regard to the late Holocene deposition of alluvial clays which extend along the banks of Central European rivers (GOUDIE 2000). These alluvial clay deposits closely correlate with the main periods of forest clearings and reorientations of agricultural production systems, especially with those of the Roman period, the Early and High Middle Ages and the 19th century.

Historical relicts bear information on past systems of production, on patterns of thought and ways of living. They are the “historical constants” of the cultural landscape. The landscape is individualized by the dominance and peculiarity of single elements. Think of the landscapes of Northern Germany (Knick-Landschaft) or of Bretagne (Bocage), both characterized by hedgerows. The historical relicts are intrinsic elements of the cultural landscape. They are places of remembrance or ecological importance, which affect individual and societal decisions. When the material or immaterial heritage affects current actions, e.g. by re-use or protective measures, historical geographers speak of persistence.

Integration of scientific results

Scientific methods give important insights into processes of landscape development. Palaeoeco-

logical investigations provide information on past vegetation and land-use conditions as well as absolute (radiocarbon dating, dendrochronology) or relative (soil stratigraphy, archaeological correlations) chronology. In addition, methods like the phosphate analysis allow to locate abandoned settlement sites. The adoption of soil profiles, pollen diagrams, territorial features and archival sources makes feasible a critical comparison of pollen analytical results with residues from charcoal kilns (BROTHWELL & POLLARD 2001). Very often, historical geography does not carry out such investigations by itself, but integrates scientific results into its landscape research. Therefore, the ability to critically evaluate scientific sources is a core competence of the historical geographer. The crucial question is: What does a method contribute to landscape research?

Current fields of research

At present, historical geography is in a process of re-orientation due to a partly accomplished generation change. Should it move towards a science-based landscape history, participate in the discourse of historical and cultural disciplines or, with the needs of students in mind, concentrate on questions of application? This “trilemma” is reflected by the scope of historical-geographical fields of research.

Reconstruction and assessment of area-wide element cycling

Open land and forests are in permanent interaction. No matter whether they are of natural or anthropogenic origin, they influence the ecosystem as well as the possibilities and strategies of land-use. Today, physical geography demands from historical geography to provide quantitative data on the proportion of open land and forests on a mid-scale level. This data is needed to analyse processes like soil erosion, occurrences of landslides and the effects of past land-use on element cycling (e.g. in rivers). To define broad-scale models the effects of land-use changes on reference areas are reconstructed with the help of “Geographical Information Systems” (SCHENK 1993).

Historical climate research

The integration of the historical dimension contributes to central tasks of climate research (e.g. PFISTER et al. 1999): On the one hand, calibrated climatic records are too short for long term reconstructions; even in favourable cases they only reach back to the 19th century at maximum. Historical climate research is able to push the limits much further. Thus, with regard to the high variability of climatic developments, quantitative reconstructions become sounder. This helps to understand extreme changes much better. On the other hand, historical climate research uncovers analogies which give clues to the effects of climatic fluctuations. Without consideration of the causal chain “climatic fluctuations – agrarian crisis – famine – social crisis” the changes and crises of pre-industrial societies cannot be understood. Hence, historical climatic research expands the area of historical and climatic investigation. The contribution of geography lies at the regional level. It collects historical climate indicators – ice levels, floodings or the yields of certain products such as wine, hay or crops – in a database, since this kind of data can only fruitfully be analysed by the use of computers and in a European-wide network of research. Methods of interpretation range from simple correla-

tions of the quality of wine with the mean summer temperatures to multiple regressions or complex factor analyses. If these questions can be answered, “long rows” can be build to deduce future flooding probabilities or to explain single floodings and their effects more precisely. However, it remains one of the most important tasks to improve the spatial and temporal resolution of historical climate reconstructions (GLASER 2001; WEFER et al. 2002).

Landscape development during feudalism

At the moment, research into feudal landscapes is of certain importance within historical geography. The feudal influence on settlement development becomes apparent in the regional differentiation of inheritance customs (BECKER 1998). While inheritance of undivided property has a rather conserving influence on the structure of farm acreages, gavelkind appears to be the cause and driving force of a more dynamic cultural landscape development, which can be characterised by the causal chain “diversion of property – multiplication of small holdings – population increase – settlement growth”. Other immediate consequences are changes to buildings, the fragmentation of land-holding, the intensification of landuse (particularly by means of viticulture; SCHENK 1992a) as well as – after undershooting the subsistence limit – the transfer of rural population to craft production and finally to industrial production. At least in Altwürttemberg, the rise of industry is based on the supply of labour in the areas of gavelkind and protestant ethic. The early modern rise of the rural underclass and its own habitation quarters belong in this context as well.

Studies on the Cistercians have proved particularly instructive to illuminate the correlation between feudalism and landscape development. During their heydays at about 1400, more than 400 male and 900 female monasteries belonged to the fraternity of the Cistercians. As the so-called “Gray Monks” were mystically committed to alter the cultural landscape, their economy had strong and long-lasting effects on many regions. Very often these effects are still visible in the landscape, what should prompt us to treat the specific relics carefully (SCHENK 2001).

Reconstruction of past forest conditions and woodland usage

Due to their geographical extent and the length of production processes forests are important objects of study in historical geography. However, historical geography not only looks at forests as a form of vegetation, but also at processes in landscape development occurring in areas determined by forestal production (SCHENK 1992b). This might require analysis of areas and processes far apart from each other. The early modern development of the “dark woods” – a term that refers to the coniferous woods of the Black Forest and the Franken Forest – can only be understood with regard to the markets of the target areas of the Netherlands to where large timber rafts were sent via Rhine and Main. It is a matter of studying the complex network of cause and effect between woodland usage, forest conditions and regional developments in pre-industrial times. In accordance with this specific interest historical geography participates in environmental historical discussions, e.g. on the reality of timber deficits in the 18th century (SCHENK 1996b). By the analysis of different sources (e.g. forest bills as crosscheck to rather programmatic sources such as forest orders) concrete forest conditions are reconstructed against the background of regional supply and demand structures (SCHENK

1996a, 2000). Thus historical geography literally puts some abstract theories of historical woodland usage back to the earth. In a quite similar way Hans-Jürgen Nitz tested the feasibility of Wallerstein's model of the "Early Modern World-System" by historical-geographical analysis on a regional level (Nitz 1993).

Industrial use of resources and environmental pollution

Historical geographers increasingly contribute to another domain of environmental history, the history of water and air. They mainly focus on concrete spatial structures. The study of Andreas Dix on the cloth mill Ludwig Müller in Kuchenheim considers the effects of industrialisation on the cultural landscape, above all on smaller watercourses (Dix 1997). This approach provides the opportunity to study the steps of past industrial substance flows – extraction and production, conversion and processing as well as usage and consumption – in a systematic and spatially differentiated way. Thus it tries to grasp the phenomenon of industrialisation in a system- and process-oriented manner without writing the decadent story of environmental stress and destruction right from the beginning.

Applied historical geography and cultural landscape conservation

Applied historical geography is the answer of historical geography to the paradigmatic shift of geography to an applied science. Owing to the conditions of mission oriented research (deadline constraints, low budgets, addressee-focused) basic research is often neglected, which brings about a low temporal depth of papers and new methods of report presentation (e.g. expertises). Public duties and contracts set the framework; the re-use of results of basic research and appealing presentation techniques dominate. Criteria for evaluation and scale are bound to the project. The following fields of activities have been established (Dix 2000):

- In Bavaria, a standardised method for the recording of historical structures has been developed in connection with village renewal programs and land clearance projects ("Denkmalpflegerischer Erhebungsbogen"). The recording technique is based on the method of backtracking. Recent village structures are compared to cadastral maps of the 19th century and formative structures are documented in texts and maps.
- The inventory of historical traffic routes in Switzerland is an applied project, too. It benefits the protection of the natural and cultural values of the homeland and includes a survey of historical traffic routes that are considered to be protected. Furthermore, it provides insights into the Swiss history by means of publications and the reconstruction of old paths and tracks, which are made accessible to tourists.

When the planning efforts refer to historical elements and structures of an area, one speaks of cultural landscape conservation. This concept picks up the ideas of the regional development agendas of the German Federation and the European Union, which regard cultural landscapes as a basic resource for future developments. The Upper Middle Rhine Valley, which was added to the UNESCO's World Heritage list in 2002, relates to the global dimension of this discussion. Cultural landscape conservation combines methods and results of historical-geographical research with the intention of applied historical geography, which is to measure and direct regional development towards sustain-

ability. Ideally, the process of spatial planning in cultural landscape conservation takes three steps:

- (1) Cultural landscape inventories or cadastral inventory register, describe and explain cultural landscape structures and elements. Such inventories or registers come along with large-scale maps associated with standardised recording methods for the description and evaluation of the cultural landscape. In this context, Geographical Information Systems have become increasingly important.
- (2) Due to the complexity of cultural landscapes the evaluation of historical elements and structures is based on a mixture of several criteria. These criteria derive from nature (“the beauty, specific character, and cultural diversity” according to the 2002 edition of the federal law of nature protection, namely §2, Abs. 1 Nr. 14 including the term “historical landscape”) and monument conservation (historical importance, age, landscapes as stages of historical events) as well as regional planning concerns (in particular the regional specificity according to the principle of the Federal Regional Planning Act which says that “grown landscapes” should be protected in their characteristic features including the monuments of nature and culture close to them) (GUNZELMANN & SCHENK 1999).
- (3) Conservation measures allow for the fact that very often even old historical landscape structures can only be conserved to a very limited extent because of high costs or insufficient public acceptance. Thus, unless potentials for sustainable development are not destroyed, cultural landscape conservation comes to terms with continuous changes as a characteristic of cultural landscapes. The discussion on values, overall concepts and measures should ideally take place in open dialogues with the parties involved. Guides to the cultural heritage in our landscapes, heritage trails and landscape museums should draw people’s attention to the assets of the cultural landscape (AURIG 1999).

Historical geography as a bridge

As it is often claimed for Geography in general, Historical Geography acts as a bridge between different natural and cultural sciences in both research and teaching. With regard to its methods and questions it takes up a very distinct position in the field of science:

- (1) It is a subdisciplin of Geography as a whole, in particular of historical-genetical geography with its close ties to the questions posed by physical geography regarding landscape history and those question asked by rather “soft” spatial sciences like climate history or landscape ecology. Historical Geography is a part of applied Geography as well.
- (2) Historical Geography is an environmental historical bridge between historical and cultural sciences (in particular of economic, social and regional history as well as archaeology and folklore studies) because of similar methods and complementary questions. In this interdisciplinary network Historical Geography is characterised by its great historical depth reaching far back into prehistoric times. Irrespective of this last remark the recent tendencies in historical genetical research can be circumscribed by three comparatives: greater proximity to environmental history, more presence-oriented and more planning-oriented.

Bibliography

- AURIG, R. (ed.) (1999): *Kulturlandschaft, Museum, Identität*. Beucha.
- BAIER, B. & R. WOLF (1993): *Hohlwege. Entstehung, Geschichte und Ökologie der Hohlwege im westlichen Kraichgau*. Karlsruhe 1993.
- BAKER, A.R.H. (2003): *Geography and history: bridging the divide*. Cambridge 2003 (= *Cambridge Studies in Historical Geography* 36).
- BECKER, H. (1998): *Allgemeine Historische Agrargeographie*. Stuttgart 1998.
- BERGMANN, R. (1993): *Zwischen Pflug und Fessel. Mittelalterliches Landleben im Spiegel der Wüstungsforschung*. Münster 1993.
- BORK, H.-R. et al. (eds.) (1998): *Landschaftsentwicklung in Mitteleuropa*. Gotha 1998.
- BORK, H.-R. & A. LANG (2003): Quantification of past soil erosion and land use/land cover changes in Germany. In: A. Lang, K. Henrich & R. Dikau (eds.): *Long Term Hillslope and Fluvial System Modelling. Concepts and Case Studies from the Rhine River Catchment*. Berlin/Heidelberg/New York 2003: 231-239 (= *Lecture Notes in Earth Sciences* 101).
- BORK, H.-R. & W. SCHENK (2002): Kulturlandschaftsforschung. *Themenheft der Petermanns Geographischen Mitteilungen* 146, 2002, 6. Heft.
- BROTHWELL, D.R. & A.M. POLLARD (eds.) (2001): *Handbook of Archaeological Sciences*. London 2001.
- BURGGRAFF, P. & K.-D. KLEEFELD (1998): *Historische Kulturlandschaft und Kulturlandschaftselemente*. Münster 1998.
- DENECKE, D. (1994): Interdisziplinäre historisch-geographische Umweltforschung: Klima, Gewässer und Böden im Mittelalter und der Frühneuzeit. In: *Siedlungsforschung* 12, 1994: 235-263.
- DENECKE, D. & K. FEHN (eds.) (1989): *Geographie in der Geschichte*. Stuttgart 1989.
- DIX, A. (1997): Industrialisierung und Wassernutzung: eine historisch-geographische Umweltgeschichte der Tuchfabrik Ludwig Müller in Kuchenheim. Köln 1997 (= *Beiträge zur Industrie- und Sozialgeschichte* 7).
- DIX, A. (2000): Beiträge der Geographie zur Kulturlandschaftspflege. Ein Überblick zur aktuellen Situation in Deutschland. In: *Berichte zur Deutschen Landeskunde* 74, 2000: 283-302.
- FEHN, K. (1975ff.): Historische Geographie, Siedlungsgeschichte und archäologische Siedlungsforschung (Literatursammelberichte). In: *Blätter für deutsche Landesgeschichte* 111, 1975: 31-53; 113, 1977: 571-592; 116, 1980: 330-362; 118, 1982: 406-430, 751; 122, 1986: 293-343; 125, 1989: 211-249; 128, 1992: 299-367; 134, 1998: 556-702.
- FEHN, K. (1998): Historische Geographie. In: H.-J. Goertz (ed.): *Geschichte. Ein Grundkurs*, Reinbek 1998: 394-407.
- FEHN, K. et al. (1988): *Genetische Siedlungsforschung in Mitteleuropa und Seinen Nachbarräumen*. Bonn 1988.
- GLASER, R. (1996): Data and Methods of Climatological Evaluation in Historical Climatology. *Historical Social Research* 21(4), 1996: 56-88.
- GLASER, R. (2001): *Klimageschichte Mitteleuropas. 1000 Jahre Wetter, Klima Katastrophen*. Darmstadt 2001.
- GOUDIE, A. (2000): *The Human Impact on the Natural Environment*. Oxford 2000.
- GUNZELMANN, T. & W. SCHENK (1999): Kulturlandschaftspflege im Spannungsfeld von Denkmalpflege, Naturschutz und Raumordnung. In: *Informationen zur Raumentwicklung* 5/6, 1999: 347-360.
- HELMIG, G., B. SCHOLKMANN & M. UNTERMANN (eds.) (2002): Centre, Region, Periphery: medieval Europe Basel 2002. *3rd International Conference of Medieval and Later Archeology*, Basel (Switzerland) 10.-15. September 2002. Bad Bellingen-Hertingen 2002.
- JÄGER, H. (1987): Entwicklungsprobleme Europäischer Kulturlandschaften. *Eine Einführung*. Darmstadt

1987.

- JÄGER, H. (1994): *Einführung in die Umweltgeschichte*. Darmstadt 1994.
- KLEEFELD, K.-D. & P. BURGGRABER (eds.) (1997): *Perspektiven der Historischen Geographie. Siedlung - Kulturlandschaft - Umwelt in Mitteleuropa*. Bonn 1997.
- NITZ, H.-J. (1992): Historical Geography. In: E. Ehlers (ed.), *40 Years After: German Geography. Development Trends and Prospects 1952-1992*. A Report to the International Geographical Union, Bonn/Tübingen 1992: 145-172.
- NITZ, H.-J. (ed.) (1993): *The Early Modern World System in Geographical Perspective*. Stuttgart 1993.
- PFISTER, C., R. BRÁZDIL & R. GLASER (eds.) (1999): Climatic Variability in Sixteenth Century Europe and Its Social Dimension. In: *Climatic Change*, Special Volume 43 (1), 1999.
- SCHENK, W. (1992a): Viticulture in Franconia Along the River Main – human and natural influences since 700 AD. In: *Journal of Wine Research* 3 (3), 1992: 185-203.
- SCHENK, W. (1992b): Fundamental Changes in the Forest Landscapes of Lower Franconia in the 19th Century. In: A. Verhoeve & J.A.J. Vervloet (eds.): *The Transformation of the European Rural Landscape: Methodological issues and agrarian change 1770-1914*. Brussels 1992: 249-258
- SCHENK, W. (1993): The use of CAD and GIS systems in the Reconstruction of Large-Scale Historic Field Systems and Land Utilisation – An Example out of the 16th Century in Southern Germany. *History and Computing* 5 (1), 1993: 25-34.
- SCHENK, W. (1996a): *Waldnutzung, Waldzustand und Regionale Entwicklung in vorindustrieller Zeit im Mittleren Deutschland, Historisch-geographische Beiträge zur Erforschung von Kulturlandschaften in Mainfranken und Nordhessen*. Stuttgart 1996.
- SCHENK, W. (1996b): Forest Development Types in Central Germany in Pre-Industrial Times. A Contribution by Historical Geography to the Solution of a Forest History Argument about the “Wood Scarcity” in the 18th Century. In: Istituto internazionale di storia economica “F. Datini” (ed.): *L’uomo e la foresta secc. XIII-XVIII*. Prato: 201-223 (= Serie II - Atti delle “Settimane di Studi e altra Convegni 27).
- SCHENK, W. (ed.) (1999): *Aufbau und Auswertung “Langer Reihen” zur Erforschung von historischen Waldzuständen und Waldentwicklungen*. Tübingen 1999.
- SCHENK, W. (2000): Preindustrial Forests in Central Europe as Objects of Historical-Geographical Research. In: M. Agnoletti & S. Anderson (ed.): *Methods and Approaches in Forest History*. Wallingford/New York: 129-138 (= IUFRO Research Series 3)
- SCHENK, W. (2001): Identifizierung und Pflege sowie mediale Vermittlung des landschaftlichen Erbes des Zisterzienserordens, dargestellt an Beispielen aus Süddeutschland. In: P. Rückert et al. (eds.), *850 Jahre Kloster Herrenab*. Stuttgart 2001: 211-221.
- SCHENK, W. (2005) : Historische Geographie. In: Winfried Schenk und Konrad Schliephake (eds.): *Allgemeine Anthropogeographie*. Gotha: 215-264.
- SCHENK, W. et al. (eds.) (1997), *Kulturlandschaftspflege. Beiträge der Geographie zur räumlichen Planung*. Stuttgart/Berlin 1997.
- SCHENK, W. & W. KRINGS (2005): Zum Stand der historisch-geographischen Forschung zu Bayern. In: Konrad Ackermann und Hermann Rumschötte (Hrsg.): *Bayerische Geschichte. Landesgeschichte in Bayern*. München: 27-50 (= *Zeitschichte für bayerische Landesgeschichte* 68, 1)
- SCHÖNFELDER, G. (1999): Kulturlandschaft und Karte. In: G. Haase (ed.): *Beiträge zur Landschaftsanalyse und Landschaftsdiagnose*. Leipzig 1999: 18-74 (= *Abhandlungen der Sächsischen Akademie der Wissenschaften, Math.-Nat.* 59,1).
- SIMMONS, I. G. (1993): *Environmental History: A Concise Introduction*. Oxford 1993.

SONNABEND, H. (1999): Mensch und Landschaft in der Antike. *Lexikon der Historischen Geographie*. Stuttgart 1999.

UNESCO – World Heritage Centre (2003): Cultural Landscapes: the Challenges of Conservation. *World Heritage Series* no.7. http://whc.unesco.org/series/papers_07.pdf

WEFER, G. et al. (eds.) (2002): *Climate Development and History of the North Atlantic Realm*. Berlin 2002.

〔追記〕

ヴィンフリート・シェンク博士は1957年ドイツ・ヴェルツブルク生まれ、現在ボン大学地理学研究所教授。2001年度冬学期よりクラウス・フェーン教授の後任として、同大学のドイツ唯一の歴史地理学専攻 (<http://www.giub.uni-bonn.de/hisgeo/>) を主宰している。ドイツを代表する歴史地理学者として精力的な活動を展開しており、ARKUM e. V. (中央ヨーロッパ歴史的文化的文化景観研究協議会) 会長などの要職を務めている。本稿は、2004年7月に國學院大学大学院招聘研究者として初来日した際、歴史地理学会第201回例会 (2004年7月17日、於國學院大学渋谷キャンパス、國學院大学文学部講演会と共催) において報告した内容をもとに、後日、本人の要望で本誌掲載のために新たに書き下ろした英語論文である。

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